Forsyth Technical College

Forsyth Technical College

GENERAL CATALOG

1987-1989

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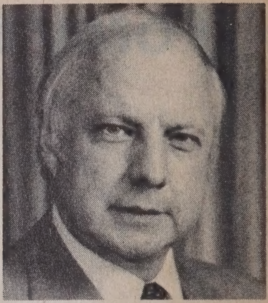
WINSTON-SALEM, NORTH CAROLINA 27103

All statements in this publication are announcements of present policies and are subject to change at any given time without prior notice. Forsyth Technical College reserves the right to make changes in program requirements and offerings, in regulations, and in fees. The College also reserves the right to discontinue at any time programs or courses described in this publication. While every effort will be made to give advance notice of any changes of programs or courses, such notice is neither guaranteed nor required. The College further reserves the right, at any time, to request the student to withdraw when it considers such action to be in the best interest of the student and for the College.

An Equal Opportunity Educational Institution



A Message From The President

Forsyth Technical College is one of fifty-eight institutions in North Carolina making up the Community College System. With an "open door" admissions policy, it is the intent of the College to provide educational opportunities for any student wishing to apply. Every effort is made to provide programs to meet the needs of the students. The instructional programs are planned and periodically updated to allow for maximum success in securing and retaining employment.

You are the reason for the existence of the College. The decision as to whether to take advantage of the educational benefits is up to you. The administration and faculty are prepared, ready, and willing to assist you and provide the best instruction available in the North Carolina Community College System.

You will find FTC is a modern physical plant containing shops, laboratories, and classrooms designed to meet your educational and training needs.

This catalog may well hold the key to your future educational success and personal happiness. As you review the program offerings, you will see many technical and vocational programs which are open to you at FTC. Your enrollment and successful completion of one of the programs may be the best investment you could make toward reaching your career goals.

Programs for self-improvement of the adult community are offered by FTC. Adults may enroll in classes to improve existing skills, achieve competency in subject areas leading to a high school diploma, or receive instruction in other academic, avocational, or technical fields.

Should you make the decision to enroll at Forsyth Technical College, I welcome you to our family and hope you will be successful. I hope your experiences will bring you success and happiness in the future. I urge you to take full advantage of the opportunities at this institution.

Please contact any member of the faculty, staff, or me should you need assistance.

Bob H. Greene

Bob H. Greene
President

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ACADEMIC CALENDAR

1987-1988

FALL QUARTER, 1987

Faculty Orientation	Monday, August 31 (FWD)
Registration	Tuesday and Wednesday, September 1 and 2 (FWDs)
First Day of Classes	Thursday, September 3
Labor Day Holiday	Monday, September 7
Last Day to Add Classes	Wednesday, September 9
Last Day of Classes	Thursday, November 19
Grade Posting	Friday, November 20 (FWD)
Faculty Work Day	Monday, November 23

WINTER QUARTER, 1987-88

Registration	Tuesday and Wednesday November 24 and 25 (FWDs)
Thanksgiving Holiday	Thursday and Friday, November 26 and 27
First Day of Classes	Monday, November 30
Last Day to Add Classes	Thursday, December 3
Christmas and New Year Holiday	Wednesday, December 23 thru Friday, January 1
Last Day of Classes	Wednesday, February 24
Grade Posting	Thursday, February 25 (FWD)
Faculty Workday	Friday, February 26

SPRING QUARTER, 1988

Registration	Monday, February 29 and Tuesday, March 1 (FWDs)
First Day of Classes	Wednesday, March 2
Last Day to Add Classes	Monday, March 7
Easter Holiday	Monday, April 4
Last Day of Classes	Wednesday, May 18
Grade Posting	Thursday, May 19 (FWD),
Faculty Work Day	Friday, May 20
Graduation	Friday, May 20

SUMMER QUARTER, 1988

Registration	Monday, May 23 (FWD)
First Day of Classes	Tuesday, May 24
Last Day to Add Classes	Friday, May 27
Memorial Day Holiday	Monday, May 30
Independence Day Holiday	Monday, July 4
Last Day of Classes	Wednesday, August 10
Grade Posting	Thursday, August 11 (FWD)
Faculty Work Day	Friday, August 12
Graduation	Friday, August 12
ANNUAL LEAVE PERIOD	Monday, August 15 thru Friday, August 26

ACADEMIC CALENDAR

1988-1989

FALL QUARTER, 1988

Faculty Orientation	Monday, August 29
Registration	Tuesday and Wednesday August 30 and 31 (FWDs)
First Day of Classes	Thursday, September 1
Labor Day Holiday	Monday, September 5
Last Day to Add Classes	Wednesday, September 7
Last Day of Classes	Thursday, November 17
Grade Posting	Friday, November 18 (FWD)
Faculty Work Day	Monday, November 21

WINTER QUARTER, 1988-89

Registration	Tuesday and Wednesday November 22 and 23 (FWDs)
Thanksgiving Holiday	Thursday and Friday November 24 and 25
First Day of Classes	Monday, November 28
Last Day to Add Classes	Thursday, December 1
Christmas and New Year Holiday	Friday, December 23 thru Friday, December 30
Last Day of Classes	Monday, February 20
Grade Posting	Tuesday, February 21 (FWD)
Faculty Work Day	Wednesday, February 22

SPRING QUARTER, 1989

Registration (FWD)	Thursday and Friday February 23 and 24 (FWDs)
First Day of Classes	Monday, February 27
Last Day to Add Classes	Thursday, March 2
Easter Holiday	Friday, March 24 and Monday, March 27
Last Day of Classes	Tuesday, May 16
Grade Posting	Wednesday, May 17 (FWD)
Faculty Work Days	Thursday and Friday May 18 and 19
Graduation	Friday, May 19

SUMMER QUARTER, 1989

Registration	Monday, May 22 (FWD)
First Day of Classes	Tuesday, May 23
Last Day to Add Classes	Friday, May 26
Memorial Day Holiday	Monday, May 29
Independence Day Holiday	Tuesday, July 4
Last Day of Classes	Wednesday, August 9
Grade Posting	Thursday, August 10 (FWD)
Faculty Work Day	Friday, August 11
Graduation	Friday, August 11
ANNUAL LEAVE PERIOD	Monday, August 14 thru Friday, August 25

HISTORY AND PURPOSE

Forsyth Technical College can trace its beginnings to early adult and high school vocational courses which were available in Winston-Salem. In 1958, a Chamber of Commerce Study Committee recommended that an Industrial Education Center be built to provide the trade and technical training needed by local industry. A bond issue provided the money to start construction of two buildings late in 1959, and the first adult classes were begun in October, 1960. In 1963, a third building was constructed, and new technical programs were added. That same year the North Carolina Legislature passed the Community College Act, creating a statewide system of Community Colleges, Technical Institutes, and Industrial Education Centers. In January, 1964, the name of the school was changed to Forsyth Technical Institute. The operation of the school was transferred from the Winston-Salem/Forsyth County Schools to a local board of trustees to govern the Institute following policies established by the State Board of Community Colleges and the State Department of Community Colleges.

Additional building construction throughout the years has allowed for program development and expansion to meet the increasing need for vocational and technical training. In 1984, a bond referendum provided funds for the acquisition of Dalton Jr. High School, which became the Institute's West Campus, and for the construction of a high technology building, Hauser Hall. In July, 1985, Forsyth Technical Institute became Forsyth Technical College.

MISSION AND PURPOSE OF FORSYTH TECHNICAL COLLEGE

The mission and purpose of Forsyth Technical College is to prepare people for gainful employment and effective community membership. The major objective of the curriculum programs is to develop within the student a vocational or technical proficiency to meet the expanding advances in business and health occupations. The college is also dedicated to the concept of continuing education through the Adult Education Program directed toward self-improvement in cultural, avocational, and vocational pursuits.

The course of study at Forsyth Technical College seeks to attain the stated purpose of the College by:

(1) providing effective teaching to all who enroll;
(2) providing educational opportunities for adults who discontinued their formal training before mastering the basic skills in general education;
(3) providing vocational training for students who are preparing to enter trades;
(4) providing technical training for those persons wishing to enter the more highly skilled occupations in business, industry, and health services;
(5) providing technical, vocational, and enrichment courses on a part-time basis for adults now employed.

EQUAL OPPORTUNITY/AFFIRMATIVE ACTION

Discrimination

Forsyth Technical College is an equal opportunity institution, in compliance and agreement with the provisions set forth in Title VI of the Civil Rights Act of 1964, Title IX of the Educational Amendments of 1972, and Section 504 of the Rehabilitation Act of 1973. No person shall be discriminated against on the basis of race, sex, religion, age, national origin, or handicap, if otherwise qualified.

Special Provisions for Handicapped Persons

It is the intent of the College that all courses of study be accessible to all qualified students. Handicapped persons should provide approximately one quarter of advance notice for the Dean of Student Services in order to identify any special equipment needs and to facilitate adjustments in programs, facilities, or schedules, if needed.

Special services currently available for handicapped students include tutors and note-takers, a TTY (which is the telephone for the deaf), and staff members with basic manual language skills. These free services may be arranged in the Individualized Learning Center and in Student Services. Arrangements must be made through the counselor for special needs students. The counselor can assist with any special provisions to assist in the learning process. Handicapped students who require attendant care are responsible for their own arrangement.

Grievance Procedures

Applicants, employees, and students of FTC may lodge grievances involving alleged violations of rights under the provisions of Title VI of the Civil Rights Act of 1964, Title IX of the Education Amendments of 1972, and Section 504 of the Rehabilitation Act of 1973 with the Affirmative Action Officer or the Dean of Student Services.

LOCAL ADVISORY COMMITTEES

Each program of study at Forsyth Technical College has its own advisory committee. The committees are composed of representatives of local businesses, industries, and education and community organizations.

The advisory committees provide the necessary contact between the College and the community in an effort to maintain current and relevant programs of instruction to meet the needs of the community.

LOCATION AND FACILITIES

The College's Main Campus is located at 2100 Silas Creek Parkway in the southwest section of Winston-Salem. The West Campus is located at 1300 Bolton Street at the intersection of Bolton Street and Silas Creek Parkway. The Health Technology programs are housed in the Allied Health Building at North Carolina Baptist Hospital and the Paramedical Building at Forsyth Memorial Hospital. All campuses are easily accessible from U. S. Highway 52, North Carolina Highway 150, and Interstate Highway 40.

Off campus Individualized Learning Centers are located at the Forsyth County Public Library on West Fifth Street, Whitaker Care Center of Forsyth Memorial Hospital, and Paddison Memorial Library in Kernersville, as well as the services on Main Campus and West Campus.

HOURS OF INSTRUCTION

Classes are scheduled between the hours of 7 a.m. and 11 p.m., Monday through Friday. Some courses are offered on Saturday mornings.

Students in Health Technology programs (particularly nursing programs), can expect clinical practice to be scheduled between the hours of 6:30 a.m. and 11 p.m., seven days a week.

ACCREDITATION

Forsyth Technical College is accredited by the Southern Association of Colleges and Schools.

The Associate Degree Nursing program and the Practical Nurse Education program are accredited by the North Carolina State Board of Nursing. Respiratory Therapy Technology, Radiologic Technology, and Nuclear Medicine Technology are accredited by the American Medical Association through the Committee on Allied Health Education and Accreditation (CAHEA).

The College is a member in good standing of the American Association of Community and Junior Colleges.

Electronics Engineering Technology, Manufacturing Engineering Technology, and Mechanical Drafting and Design Engineering Technology are accredited by the Technology Accreditation Commission of the Accreditation Board for Engineering and Technology (TAC/ABET).

FTC REGIONAL AUTOMOTIVE TRAINING CENTER

Forsyth Technical College was chosen to be a technical service training center for the Ford Motor Company in 1984. This center is one of only five college-based centers in the United States. This program provides the latest training on a continuous basis using Ford Motor Company's supplies, special tools, equipment, and technical materials. The automotive mechanics curriculum benefits through the use of the items provided by Ford Motor Company to keep the training consistent with new and advancing technology in the automotive field.

PROGRAMS OF STUDY

ASSOCIATE IN APPLIED SCIENCE DEGREE

Accounting
Architectural Technology
Associate Degree Nursing
Banking and Finance
Business Administration
Business Computer Programming
Computer Engineering Technology
Early Childhood Specialist
Electromechanical Technology
Electronics Engineering Technology
Horticulture Technology
Law Enforcement Technology
Manufacturing Engineering Technology
Marketing and Retailing
Mechanical Drafting and Design Technology
Nuclear Medicine Technology
Radiologic Technology
Real Estate
Respiratory Therapy Technology-Therapist
Secretrial-Executive
Secretarial-General Office

ASSOCIATE IN GENERAL EDUCATION DEGREE

General Education Program

VOCATIONAL DIPLOMA

Air Conditioning, Heating and Refrigeration
Automotive Body Repair
Automotive Mechanics
Carpentry and Cabinetmaking
Diesel Vehicle Maintenance
Electrical Installation and Maintenance
Electronic Servicing
Graphic Arts-Printing
Machinist
Plumbing and Pipefitting
Practical Nurse Education
Welding

CERTIFICATE

Clerical Processing
COBOL Programming
Microcomputing

Some programs of study may be available both day and evening. For specific information, contact the Admissions Office.

ADULT CONTINUING EDUCATION

Adult Basic Education
Adult High School Program
General Adult Enrichment Program
Job Training Partnership Act
New and Expanding Industry Training Programs
Special Seminars and Workshops
Management Development Training
Vocational-Technical Extension Programs

ADMISSIONS

ADMISSION REQUIREMENTS

Forsyth Technical College is an Equal Opportunity Institution and operates under an "open door" admissions policy. Admission to the College does not, however, imply immediate admission to the program desired by the applicant. Before a prospective student is admitted to a specific curriculum, placement tests will be scheduled and counseling interviews may be arranged. This process helps the student to evaluate his/her potential for success in his/her chosen field. When an evaluation of test scores and other evidence indicates a lack of readiness to enter a specific program, the student may be approved to the Pre-Technical or the Pre-Vocational programs or he/she may be encouraged to re-examine his educational and occupational goals.

Forsyth Technical College will accept credit from other technical institutes and colleges. For specific information refer to "Transfer Student."

Admission to Associate Degree Programs

High school graduation, or the equivalent, is required of all applicants for degree programs. The high school equivalency certificate or the state adult high school diploma is acceptable in lieu of a regular high school diploma.

Applicants for the associate degree programs who are not high school graduates may arrange to complete high school in the Continuing Education program or take the high school equivalency examination (GED) at the Individualized Learning Center.

Applicants for admission to the Mechanical Drafting and Design Engineering Technology and Manufacturing Engineering Technology must present one unit of algebra and one unit of geometry. Electronic Data Processing, Architectural Technology, Electronics Engineering Technology, and Electromechanical Technology applicants must present one unit each in algebra. Applicants for admission to the Computer Engineering Technology program must present three units of mathematics beginning with Algebra I and one half unit of typing. Applicants for admission to associate degree health programs must present one unit in algebra, one unit in biology, and one unit in chemistry. Applicants for Associate Degree Nursing must have completed the unit of chemistry within a five-year period. High School physics is recommended for Engineering Technology and Health Technology curricula.

Any applicant who does not meet course requirements may take courses as a special credit student any quarter prior to admission to a curriculum or enroll in the Individualized Learning Center courses. Deficiencies must be made up before admission to a curriculum.

Applicants for associate degree programs should submit scores on either the Scholastic Aptitude Test (SAT) or the Comparative Guidance and Placement Test (CGP). Information concerning the Scholastic Aptitude Test may be obtained from local high school counselors or the FTC's Career Guidance Center in Student Services. Information on, and registration for, the Comparative Guidance and Placement Test is available from the Student Services Office.

Applicants for programs may be subject to approval by the College Admissions Review Committee for that program (particularly in the Health Technology programs). The members of the Admissions Review Committee come from instructional and administrative staff of the curricula and the Student Services staff. The purpose of the committee is to evaluate all available data concerning each applicant. A majority of the committee must concur that an applicant meets minimum criteria before he/she is admitted. Applicants for those programs in which the enrollment quota is filled before all applications are received will be informed that they may reapply for the next enrollment cycle. Some programs have more than a once-a-year enrollment cycle.

It should be noted that certain Health Technology programs have to admit applicants under State Statutes of the licensure agencies. The North Carolina Board of Nursing has State Statutes that identify reasons for prohibiting licensure for Associate Degree Nursing and Practical Nursing Education graduates. The reasons are presented during the admission process.

All students in Nuclear Medicine Technology and Radiologic Technology come under the Radiation Exposure Regulations of the state and federal governments (Radiation Safety Hazard Regulation). Any student who receives exposure in excess of permissible limits as defined by the regulations will be advised of the possible harmful effects and may be dropped from the curriculum. The regulations pertaining to students below the age of 18 are more stringent than those for the older student.

Admission to Diploma Programs

Applicants for one-year diploma programs must be high school graduates or meet North Carolina Equivalency certificate (GED) standards. For non-high school graduates with special needs, however, exceptions may be made under certain circumstances in all programs **except Practical Nurse Education and Respiratory Therapy Technology-Technician program.**

Applicants who are not high school graduates may arrange to complete high school in the Continuing Education Adult High School program or take the high school equivalency examination (GED) at the Individualized Learning Center. Applicants may be admitted into some programs on the basis of high school records. However, scores on the SAT or the CGP may be required. Questions concerning the need for testing should be directed to the Admissions Office.

Because of the specialized nature of some of the programs, one unit of high school algebra is recommended for Air Conditioning, Building Trades Drafting, Electrical Installation, Electronic Servicing, Machinist, and Practical Nurse Education. High school geometry is also recommended for Building Trades Drafting and Machinist. Biology is recommended before entering Practical Nurse Education. Algebra I, biology, and chemistry are required for entry into Respiratory Therapy Technology-Technician.

Admission to the Practical Nurse Education program and Respiratory Therapy Technology-Technician program may also be subject to approval by the Health Admission Review Committee.

Admission to Continuing Education and Extension Programs

Persons enrolling must be 18 years or older. Further information concerning admissions and registration procedures may be obtained from the office of the Dean of Continuing Education.

ADMISSION PROCEDURES

An applicant for admission to any degree or diploma program should:

1. Obtain an application form from the Admission Office or from a high school counselor.
2. Submit the properly completed application to the Admissions Office.
3. Arrange to take the Comparative Guidance and Placement Test (CGP) through the Student Services Office. Scholastic Aptitude Test (SAT) scores may be substituted for the Comparative Guidance and Placement Test.
4. Request that a transcript of all high school and post high school academic work be sent directly to the Admission Office.
5. Submit recommendations if requested.
6. Report for a personal interview, if requested, on the date scheduled by the Admissions Office. At this interview, test scores and previous academic records will be evaluated and the applicant will be advised as to eligibility for admission to the desired program. If a personal interview is not required, the student will be notified of his status in writing.
7. Submit a properly completed health appraisal form when requested.
8. Participate in an orientation program as a condition of approval for every student admitted to the Institute.

Students who are currently enrolled and wish to be considered for another curriculum must update an application in the Admissions Office.

SPECIAL INFORMATION FOR FOREIGN STUDENTS

Forsyth Technical College does not issue the I-20 Form required by the United States Office of Immigration for foreign students to study in the United States. The College will be glad to help interested students in gaining information about colleges and universities that do offer the I-20 Form. Foreign students under other types of visas are considered for admission through normal admission procedures.

Applicants graduating from high schools outside the United States must produce a transcript and must demonstrate high school proficiency through satisfactory scores on either the GED or the Comparative Guidance and Placement Test (CGP). Applicants graduating from colleges and universities outside the United States are required to submit a translated transcript and may be required by the Admissions Counselor to take the CGP entrance test.

READMISSIONS

Students who have withdrawn in good academic standing should contact the Admissions Office to update their application. If the application for readmission is for a different curriculum, standard admission requirements for new students will apply.

Students who have withdrawn while on academic probation or who have been suspended for academic deficiencies must reapply through the Admissions Office. Approval for readmission for the same curriculum or an alternate selection will be based on the applicant's ability and aptitude, the time elapsed since withdrawing, actions of the Academic Review Committee, and the applicant's career objectives. Students granted readmission may have course load restrictions, specific grade requirements, and/or required counseling sessions in order to remain enrolled in the curriculum. When good academic standing has been reestablished, the restriction(s) will be removed.

Former students who reapply for admission may be asked to supply the Admissions Office with transcripts and test scores.

There are specific guidelines for readmission into the Health Technology programs. These readmission guidelines are available in the Admissions Office. All students applying for readmission are subject to review by an Admissions Review Committee for that curriculum. Students who have been suspended for disciplinary reasons cannot be readmitted without approval of the Dean of Student Services.

TRANSFER STUDENTS

Applicants who have attended other institutions of higher learning may transfer credits in courses comparable in content, objective, quality, and credit hours to those offered at Forsyth Technical College. Direct transfer of credits may be granted if the student is transferring from a regionally accredited institution or is a member of the North Carolina Community College System. Provisional transfer credit may be granted if the student is transferring from an institution that is not regionally accredited or is not a member of the North Carolina Community College System but is recognized by the Council on Post Secondary Accreditation (see "Provisional Transfer Credit" section).

No grade lower than a "C" may be transferred from other institutions. Courses taken on "Pass/Fail" basis will be considered only after receiving information on requirements necessary to receive a "Pass" grade. All final transcripts for transfer work should be received at least two weeks before enrollment. Determination of transfer credit is complete by the Admission Counselors. On questionable courses the determination may be made by the Director of Admissions and Career Guidance after consultation with appropriate departmental chairpersons. A written evaluation will be sent to the student.

Credits transferred from other schools will be reflected on students' transcripts as hours earned and will not be used in the computation of grade point averages. When a student transfers, between curricula within Forsyth Technical College, credits attempted, including grades, hours earned, and quality points, will be forwarded to any curriculum where the courses are identical. A student's initial cumulative grade point average in a new curriculum will be computed from the credits forwarded to that curriculum. For courses that are not identical but comparable, credit will be granted in the same manner as courses transferred from another institution. Such courses will not be used in computing grade point average; only hours earned will be transferred.

Many courses with a technical or skill content have time limitations on the acceptance of transfer credit. This includes credits earned at other institutions and/or credits earned at Forsyth Technical College. Generally, courses in this classification taken more than 2-5 years before entry into the College can not be considered for transfer purposes. A complete list of these courses and the specific time limitations are maintained by the Admissions Office. In such instances, students may challenge out-of-date courses by proficiency examinations when appropriate and available.

Inquiries concerning transfer credits granted must be made during the student's first quarter of enrollment and addressed to the appropriate Admissions Counselor. If the student is dissatisfied with the transfer credit as granted, requests should be made in writing to the Director of Admissions and Career Guidance who will confer with the appropriate division dean. After deliberations between the division dean and the director, the student will be notified as to the final decision on transfer credit to be granted.

PROVISIONAL TRANSFER CREDIT

Students transferring from an institution not regionally accredited but recognized by the Council on Post-Secondary Accreditation (COPA) may be granted provisional transfer credit under the guidelines and procedures as set forth by the Office of Student Services and approved by the President.

1. Any applicant from institutions that are not regionally accredited or that are not members of the North Carolina Department of Community Colleges must meet all the requirements for admission as an entering student in the specific curriculum.
2. Upon receipt of an official final college transcript, credit will be determined according to FTC curriculum guidelines, and the student will be notified of courses provisionally accepted toward graduation. Grades lower than a "C" will not be considered for transfer. Courses completed on a "Pass/Fail" basis can be considered only upon receipt of information on requirements necessary to receive a pass grade.
3. Student must satisfactorily complete 24 quarter hours of credit academic work at FTC before provisional transfer credit is officially accepted and recorded on FTC transcript. The term "satisfactory" means the student has a minimum 2.00 cumulative grade point average in FTC course work and meets any other academic requirements necessary to continue in the specific curriculum at the College.
4. It will be the responsibility of the student to request that provisional transfer credit be officially accepted after the minimum quarter-hours-in-residence have been met. The request should be made to the Director of Student Records and Registration.
5. Between initial enrollment and acceptance of transfer credit, students must complete prerequisite courses at Forsyth Technical College.

NOTE: In some technical or skill-level courses proficiency examinations (when appropriate and available) might still be necessary to determine proper academic placement.

TRANSFER TO SENIOR COLLEGES AND UNIVERSITIES

Credits earned in technical level courses at Forsyth Technical College may be transferred to similar programs at other institutions. Acceptability of any transfer credit is determined by the institution to which the student wishes to transfer.

Direct transfer agreements have been negotiated with Greensboro College, Appalachian State University (Bachelor of Technology), and Winston-Salem State University (Bachelor of Applied Science) for certain courses and/or curricula. Other institutions that may accept credit on an individual basis include: (1) Appalachian State University, (2) Gardner-Webb College, (3) Guilford College, (4) High Point College, (5) North Carolina A & T State University, (6) University of North Carolina at Asheville, (7) University of North Carolina at Charlotte, (8) Western Carolina University, and (9) Winston-Salem State University.

The Career Guidance Center maintains a list of senior colleges and universities that currently accept some or all of the credit earned in a technical level (Associate in Applied Science) program. However, it is the student's responsibility to contact the admission office of the receiving institution for transfer information.

TRANSFER OF EARNED CREDIT BETWEEN FTC PROGRAMS

Credits earned in any FTC two-year Associate Degree Program may be credited toward a degree or diploma program upon evaluation by the Admission Counselors. Credits earned in the Diploma Programs are not acceptable for transfer to an associate degree program but may be credited toward a second diploma major.

ORIENTATION AND PREREGISTRATION FOR NEW STUDENTS

All new students are required to participate in an orientation preregistration session conducted by the counseling staff and faculty. The purpose of this session is to preregister the students and to acquaint the students with personnel, faculty, and student organizations. The regulations, policies, and privileges of the College as set forth in the catalog and Student Handbook are discussed and interpreted. Specifics are presented on departmental rules and schedules for individual curricula that entering students are required to be familiar with while enrolled at Forsyth Technical College.

PREREGISTRATION

The preregistration period for continuing students is held during the latter part of each quarter. During this period, each continuing student is expected to meet with his/her advisor to determine his/her schedule of courses for the upcoming quarter. Any questions arising during this preregistration period concerning transfer credit for course(s) should be directed to the appropriate Admission Counselor. A preregisitration period is conducted for new students that have been approved for admission. New student preregistration is held on specific dates prior to regular registration days. Prepayment of tuition and fees will be held on designated days prior to each quarter registration dates.

REGISTRATION

The College operates on an 11-week quarter system. Students pursuing diploma or degree programs must register at the beginning of each quarter. All students are expected to register on specific dates listed in the calendar for the academic year.

Tuition and fees must be paid on the designated registration day.

LATE REGISTRATION

Late registration can be completed during the drop/add period. The academic calendar will list the specific dates for the drop/add period. If payment for classes is not received by the close of business on the last day to add classes, enrollment for that quarter is forfeited. There is a $5.00 late registration fee. Late registration is allowed if:

1. the class is not cancelled or closed;
2. the student has the consent of his/her advisor and has met admission and prerequisite requirements.
3. the student pays the $5.00 late registration fee in full at the time of late registration, unless he/she registers late at the request of the College.

DROP/ADD, SCHEDULE CHANGES

Class schedule changes (i.e. dropping and adding of classes) may take place during the designed drop/add period. The academic calendar designates the end of the drop/add period as the last day to add classes. Although a student may withdraw from classes at any time during the quarter, schedule changes and adding of classes may be done only during the drop/add period. All class schedule changes must be approved by the student's assigned advisor, or his/her designated substitute. A drop/add schedule adjustment card must be signed and submitted to the Records Office.

GRADUATION

GRADUATION REQUIREMENTS

A student wishing to receive a degree or a diploma from the College must fulfill all course requirements. All students must earn a cumulative grade point average of 2.00 and must have received a passing grade in all required courses to be eligible for graduation.

A student who has earned a cumulative grade point average of 3.50 is eligible to be graduated with high honors.

A student who has earned a cumulative grade point average of 3.00 is eligible to be graduated with honors.

Grade Point Average (GPA) is obtained by dividing the total quality points earned by the total number of credit hours work attempted.

A candidate for an associate degree must complete at least 32 quarter hours of credit work at the College, with a minimum of 16 quarter hours in the major area. A candidate for a diploma must complete at least 16 quarter hours of credit work at the College, with a minimum of eight quarter hours being in the major area courses. Credit hours required in residence may not be met by proficiency examination.

Course requirements vary according to the program. The student should refer to the course requirements for his/her program of study to determine if all requirements have been met and should be aware at all times of his/her progress toward graduation. Course substitution may be granted by the appropriate division dean when deemed necessary for graduation.

It is also the responsibility of the student to complete an official INTENT TO GRADUATE form at least six weeks before his/her last registration. These forms may be obtained from the faculty advisor or counselor in the Counseling Center, who will assist the student in completing the form. The completed form should be submitted to the Records Office.

COURSE NUMBERING SYSTEM

Courses are numbered in accordance with the system approved by the North Carolina Department of Community Colleges.

1. Each course is designated by a three-letter prefix indicating the general subject area.
2. A number indicating a specific course within an area follows the letter prefix according to the following rules:

a. Pre-Technical courses	0001-0099
b. Technical courses	0100-0299
c. Vocational courses	1000-1099
d. Adult Continuing Education courses beyond high school	2000-3099

GRADING SYSTEM

The following grading system is generally used by Forsyth Technical College:

No. Grade	Letter Equivalent	Description	Quality Points Per Quarter Hour
94-100	A	Excellent	4
86-93	B	Good	3
78-85	C	Fair	2
70-77	D	Passing	1
Below 70	F	Failing	0
Withdrawal	W		
Passing	WP		
Failing	WF		
Incomplete	Inc		
Audit	Y		

The letter equivalent system is used for recording and reporting grades.

W—Withdrawal

Withdrawal is the grade given to a student who officially withdraws from a course through the 18th class day of a quarter.

WP—Withdrawal Passing

Withdrawal Passing is the grade given to the student who at any time after the 18th class day of the quarter withdraws from a course with a passing grade.

WF—Withdrawal Failing

Withdrawal Failing is the grade given the student who at any time after the 18th class day of the quarter withdraws from a course with a failing grade. A "WF" is computed in the grade point average equivalent to a grade of "F"

Withdrawals (WP, WF)

A student may not withdraw from a class after the 50th class day of the quarter without permission of the instructor.

How to Withdraw Officially

Every student who is considering withdrawing from a class or from school should contact the instructor, or Counseling Center to discuss the decision to withdraw.

1. Withdrawal from a Class
   It is the student's responsibility to notify the instructor, or Counseling Center in person or in writing of the decision to withdraw and to complete form 500 A-One Class Drop form. The last day of class attendance will be the date reported to the Records Office.
2. Total Withdrawal from School
   A student who must withdraw from school prior to graduation, either permanently or temporarily, should make an official withdrawal. The student must notify the Counseling Center either in person or in writing and complete forms 500 B-Multiple Class Drop form and 500 C-Withdrawal Information Sheet. This information is necessary to assure that the student's status at the time of withdrawal is clearly identified in order to expedite reentry, transfer of credit to another institution, or to provide potential employers with accurate educational information. Veterans and financial aid recipients must notify the Office of Student Financial Services. The last day of class attendance will be the date reported to the Records Office. When a student fails to notify the Counseling Center he/she is subject to receive a failing grade.

I—Incomplete

The grade of Incomplete is given only if a student has a valid reason for failure to complete the work on schedule. Illness, absence on company business, or other circumstances beyond the student's control are considered valid reasons for noncompletion of work. The student must have advised his/her instructor of the circumstance prior to the end of the quarter and have been granted an incomplete grade. The instructor must have specified the work to be made up in order to remove the incomplete and a date within the following quarter by which the work must be completed. If the conditions necessary to remove the incomplete will require additional hours of instruction, the student must reregister for the course. If, on the other hand, the student needs only to complete work without instructional supervision, this must be completed no later than the following quarter or the course must be repeated.

Any student who receives an incomplete on a course that is a prerequisite for another course must make up the incomplete work by the end of the drop/add period if he/she is registered for the next succeeding course. Should the student fail to remove the incomplete by the end of the drop/add period, he/she must drop the course which is dependent on the prerequisite.

If the incomplete is not removed by the end of the quarter immediately following the quarter it was granted, it will remain permanently recorded.

Y—Audit

Any audit of courses must have the prior approval of the appropriate division dean. The audit request form is available in the Records Office or from the appropriate division dean. It must be submitted to the Records Office for process before the end of the drop/add period.

Students auditing courses are not required to take examinations or hand in written work but may do so if they wish. No grade or credit toward a degree or diploma is given. Audit may not be changed to credit or credit changed to audit after the last day of drop/add. Normal attendance policies will apply.

HONORS AND HIGH HONORS LIST

Soon after the end of each quarter, in order to honor students who have earned outstanding scholastic records, the College identifies those students for the honors and high honors lists. In order to be named to the honors list, a student must take a minimum of 12 quarter hours of credit work and earn at least a 3.00 GPA, but less than 3.50 GPA. In order to be named to the high honors list, a student must take a minimum of 12 quarter hours of credit work and earn at least a 3.50 GPA.

ACADEMIC REGULATIONS

ACADEMIC STANDING

To be in good academic standing, a beginning student must have earned a grade point average of 2.00 by the end of the first quarter, and a cumulative grade point average (GPA) of 2.00 must be maintained thereafter.

A student who does not earn the required grade point average in any quarter will be placed on academic probation for the following quarter.

A student will automatically be removed from probation when he/she earns the required cumulative GPA.

A student on academic probation who does not earn the required grade point average in the next quarter may be required to register for a reduced load, or he/she may be required to withdraw from the program. The student may be directed to a more suitable curriculum.

Students in some curricula may have special grade progression policies. These policies will be given to the student at the beginning of course study. Students who do not meet the requirements of these policies will be dropped from the curriculum.

Each student enrolled in the College is expected to be aware of his/her academic status at all times and to be responsible for knowing he/she has failed to meet the requirements for continuing in school. Instructors, faculty advisors, and counselors in the office of Student Services are available for conferences, but it is the responsibility of the student to seek extra help if it is needed.

At the end of each quarter, each departmental Academic Review Committee meets to review students' academic standing. If a student's standing is changed in any way, other than removal from probation, the student will be notified in writing by the respective division dean.

ACADEMIC APPEAL

When a student wishes to appeal the decision of the departmental Academic Review Committee, he/she must appeal in writing to the appropriate division dean within 24 hours after the date of receipt of grades.

The dean will convene the division Academic Appeal Committee which will hear the appeal and make a recommendation to the dean. The dean will make the final decision and notify the student, the department chairperson, and the advisor in writing.

COURSE REPEAT RULE

The last grade earned on a repeat course, whether "F" or higher, will be the grade computed on GPA. Withdrawal grades ("W", "WP", or "WF") will not be considered as repeat grades.

If a student fails any course in his/her trade or technical curriculum, he/she must repeat the course until a passing grade is received; otherwise, he cannot receive the State Vocational Diploma or the Associate in Applied Science Degree. The student is responsible for scheduling makeup courses required for graduation.

If a student fails one of the courses in the major subject area, he/she may be referred to the Office of Student Services for counseling.

FAMILY EDUCATIONAL RIGHTS AND PRIVACY ACT OF 1974

The Family Educational Rights and Privacy Act of 1974 provides many safeguards regarding the confidentiality of, and access to, student records.

1. Students may review their educational records by making a written request to the Director of Student Records and Registration.
2. Student records will not be reviewed by "third parties" unless permission is obtained in writing from the student. Exceptions may be made for teachers and administrators if the information is for educational purposes. Exceptions may also be made for parents who claim the students as dependents and for credentialing, auditing, or accrediting organizations. The Dean of Student Services will make the final decision concerning access to records.
3. Official transcripts will be issued only when a written request is received from the student.
4. Forsyth Technical College does not publish or distribute directory information or any personally identifiable information.
5. Authorities with court orders are permitted to review records in the presence of Student Services staff.

SEALED RECORDS

A student's records may be sealed from the student's review and closed for purposes of readmission and grade posting due to financial debt to the College or litigation involving the student and the College. Inquires regarding sealed records should be directed to the Dean of Student Services. Transcripts will not be issued as long as the file remains closed.

RECORDS RETENTION POLICY

The retention and disposal of student records at Forsyth Technical College is in accordance with Chapters 121 and 132 of the General Statutes of North Carolina as well as the Records Handbook for Institutions in the North Carolina Community College System. Official transcripts are kept on file indefinitely and other records are microfilmed prior to disposal.

ADVISOR/ADVISEE PROGRAM

Because problems of communication often impersonalize student-faculty relationships, Forsyth Technical College has an advisor-advisee program, which is designed to provide a more personal atmosphere for the student and to increase communication between students and faculty. Each student at Forsyth Technical College is assigned an advisor from his/her own curriculum. Special credit students are advised by the counselors in the Counseling Center. Through periodic conferences between the student and advisor; it is hoped that the student will be better able to choose his/her academic program from quarter to quarter and that potential problems can be solved.

Each advisor will post regular office hours so the student can arrange conferences to discuss or explore any problem or condition. The advisor will assist the student during preregistration and registration. Students are not allowed to register without proper advising. Each student is assured that all discussions are confidential. When necessary, he/she may be referred to the Counseling Center.

ATTENDANCE

Students are expected to attend all class, laboratory, shop, practicum, and clinical experience sessions. Students have the full responsibility for accounting to their instructors for any absence and should report to their instructor as soon as possible to determine if and when work may be made up.

Students are expected to report for class, laboratory, shop, practicum, and clinical experience on time. Habitual tardiness may, at the discretion of the instructor, be considered in computing attendance.

A student must satisfy his/her instructor that he/she should be permitted to remain in a course and attend classes after incurring absences in excess of the following:

a) three (3) hours of class
b) two (2) practicum (shop, laboratory, or clinical experience) sessions which meet for two (2) or more hours
c) two (2) hours of class and one (1) practicum (shop, laboratory, or clinical experience) session which meets for two (2) or more hours

When a student is absent from a class and a practicum (shop, laboratory, clinical experience) session which meet consecutively, each session missed will be counted as an absence.

Students will be informed in writing no later than the second class meeting when a course requires any special attendance rules different from those listed in the above paragraphs. These special attendance rules **must** be on file in the office of the appropriate dean.

Class attendance is calculated from the first officially scheduled class meeting which includes the drop/add period through the last scheduled meeting.

No passing grade will be issued for a course if, for whatever reason, a student has been absent 25 percent of the total possible class time per course per quarter.

STUDENT CLASSIFICATION

Full time:	A student who is enrolled in 12 or more quarter hours of course work.
Part time:	A student who is enrolled in fewer than 12 quarter hours of work.
Special:	A student who is enrolled in credit courses but who is not working toward a degree or diploma. A special student must meet the regular admissions criteria. (See Special Credit Policy.)
Audit:	A student who is enrolled in regular course work but who is not receiving credit for work undertaken.
Freshman:	Any student who has earned fewer than 45 credit hours.
Sophomore:	Any student who has earned 45 credit hours or more.

SPECIAL CREDIT POLICY

A special credit student is one who is taking one or more curriculum credit courses but who is not enrolled in a specific curriculum. Special credit students are permitted to register for some credit courses without having to be admitted as a regular curriculum student, provided prerequisite requirements have been met and that such registration does not preempt students enrolled in a degree, diploma, or certificate program. Some credit courses will not be available to special credit students without prior instructional division approval.

For admission to Forsyth Technical College, a special credit student needs to complete the student application and be at least a high school graduate. All special credit students are required to take the Comparative Guidance and Placement test and furnish an official transcript, unless waived by the Admissions Office. Special credit students must submit an updated application and meet regular admission requirements if they desire to be approved or reclassified as a curriculum student. Satisfactory completion of courses as a special credit student does not guarantee admission to a regular curriculum program.

When a student reaches 30 credit hours, he/she will be advised to seek admission into a curriculum program, but there are no limitations on the number of credit hours earned by a special credit student. All credit hours will be evaluated for application to curriculum admission when and if the special credit student applies.

Generally, students are approved for special credit status in the following circumstances:

1. The student desires to take some relevant credit courses prior to his/her being able to start a specific curriculum. The student may desire to complete these courses before entering that curriculum in order to reduce course load, once in the program, and thus improve chances for success.
2. The student desires to take specific courses, but his/her educational goals do not include pursuing and completing a curriculum at Forsyth Technical College.
3. The student who has been denied admission into a specific curriculum that has already reached its quota at the time of his/her application but wishes to complete the related courses may also be considered a special credit student.

All general school policies, rules, and Code of Conduct apply to special credit students. Special credit students are not eligible for any form of financial aid through the College.

Those students specified for the Pre-Technical program based on CGP test scores are not eligible to be considered as special credit students.

GRADE REPORTS AND TRANSCRIPTS

Shortly after the end of each quarter, student grade reports are available to students in the Records Office.

Transcripts of the student's records cannot be sent to other schools, prospective employers, or to the student himself, unless an official written request is made by the student to the Records Office.

Grade reports and transcripts are withheld until all student obligations to the College have been met.

GUIDELINES FOR INDEPENDENT STUDY

Independent study provides an alternate means for a student to earn credit for certain required courses. It should be used only when it has been determined that it would create an unreasonable hardship for the student to wait for the course to be available. Guidelines to be used are as follows:

1. To be considered for independent study, the student must file an independent study request form with his/her advisor who will review the request and forward it with suggestions to the division dean for final action. The form should be completed during preregistration, and the student must register for the course during the regular registration period.
2. Acceptable reasons for allowing a student to take an independent study are: (1) one-time course sequencing difficulties, (2) scheduling problems that were no fault of the student, (3) needing the course for graduation at the end of the quarter.
3. A student will not be approved for independent study if his/her cumulative GPA is less than 2.00 or if he/she has failed or withdrawn failing from the course in question.
4. A student will not be allowed to take more than two courses as independent study during the entire time in a curriculum. Exceptions require special approval from the division dean.
5. All independent studies must be taught/given by a full-time instructor.

PROFICIENCY EXAMS

A student who has been approved for admission or a student already enrolled in a program of study may present a request to take the proficiency exam for a course. The student must submit the request in writing prior to enrolling in the course or no later than the tenth class day of the quarter after initial enrollment in the course. A student who withdraws from a course after the tenth day and has not formally submitted a written request cannot earn credit by proficiency exam. A student may take a proficiency exam for a given course only once in a twelve (12) month period. A $10.00 nonrefundable charge is assessed for each proficiency examination. Information on how to apply for a proficiency examination can be obtained from the office of the appropriate division dean and the Counseling Center.

STUDENT CODE OF CONDUCT AND RESPONSIBILITIES

Code of Conduct

The act of enrollment at Forsyth Technical College includes an acceptance by the student of the rules and regulations of the College. By enrolling, the student accepts the obligation to assist in making the College an effective place to conduct a learning process and to engage in the pursuit of truth, the development of self, and the improvement of society. Each enrolled student is considered to be a responsible adult, and the College assumes and requires that men and women of suitable age who enroll in the various programs will maintain standards of conduct appropriate to the status of students at the College.

The College has an inherent responsibility to maintain order on its campus. Therefore, students may or shall be suspended or dismissed for behavior deemed incompatible with the mission, the regulation or the responsibility of the College, or deemed to be in violation of any of the provisions of the Code of Conduct as set forth herein.

The College recognizes the right of an enrolled student to receive a full opportunity to learn and develop, undeterred by any and all obstacles not conducive to a sound, fundamental educational program. To this end, the College recognizes, declares, and vests certain rights in each and every student enrolled at the College.

Disciplinary Procedures

A. **Instructional Areas**—Any instructor may request a student to leave his class, laboratory, shop, or clinical area when, in the opinion of the instructor, the student's conduct or personal demeanor disrupts normal classroom activities. If the student refuses to leave the class, the instructor may call campus public safety for assistance. The instructor, identifying the student and the cause for dismissal from class, will immediately notify in writing his division dean and the Dean of Student Services of actions taken.

The burden of requesting reentry to class, laboratory, shop, or clinical areas shall be upon the student involved. Request for reentry must be made to the instructor before the next class meeting. If the instructor decides that the student needs additional counseling before reentry, the instructor may require that the student meet with the division dean or the Student Services counseling staff for further discussion. If the division dean or the Student Services counseling staff decides that the student should be dismissed from the class or from the College, the instructor will send a written report (approved by the division dean) to the Executive Vice President. The Executive Vice President will make the decision on dismissal when applicable and dismiss the student. The student will be given a copy of the report. If he/she wishes to appeal the decision, he/she must do so by writing the Student Appeals Committee within twenty-four (24) hours after receiving the dismissal notice.

B. **Non-Instructional Areas**—Any employee or student may file a written complaint for disciplinary action against any student enrolled at the College. The campus Public Safety Office may temporarily remove a student from campus when the student is jeopardizing the safety and security of faculty, staff, and/or the student body; a written complaint must be filed with the Dean of Student Services who will promptly investigate the complaint and make a decision regarding suspension, dismissal, or other disciplinary action. Both the complainant and the student involved will be notified in writing. If the student wishes to appeal the decision of the Dean of Student Services, he/she must do so by writing the Student Appeals Committee within twenty-four (24) hours after receiving the notice of the decision.

STUDENT APPEALS COMMITTEE

The Student Appeals Committee will hear the appeal of any student after the appeal process has been exhausted at the departmental and divisional level for insructional areas or Dean of Student Services for non-instructional areas. The Student Appeals Committee will hear the appeal of any student regarding the following: (1) Discipline; (2) Dismissal, except for academic standing; (3) Admissions; (4) Residency; (5) Discriminatory practices; or (6) Sexual harrassment.

The appeal will be heard under the following conditions within two working days of receipt of the confirmed appeal:

1. The student must submit a written statement containing factual and valid reasons for the appeal to the Dean of Student Services, who shall forward the statement of appeal to the committee chairperson. The chairperson may return the appeal to the student to clarify, to add factual information, or to state reasons for the appeal; he/she may reject the appeal if policies and procedures have not been followed by the student.
2. The committee will confine itself to making a recommendation on the appeal question and not on the validity of existing policies of the College. The committee reserves the right to suggest to the President that a current policy be examined for continued value to the College.
3. The committee will submit its recommendation to the President who will make a final decision and who will notify the parties involved.
4. In matters concerning residency classification, the committee's recommendation will be sent to the Dean of Student Services, who will notify the parties involved of the decision. The next step in the appeal process is to the State Residency Committee. Procedures on State appeal are available in the Dean of Student Services' office.
5. Records of the proceedings of the College Student Appeals Committee are available upon written request to the Dean of Student Services.
6. The student must obtain special permission from the Executive Vice President to attend classes pending resolution of the case on appeal.

The operating procedures of the Student Appeals Committee are available in the office of the Dean of Student Services.

STUDENT DRESS CODE

Forsyth Technical College frequently has prospective employers and other visitors on campus. In addition, many companies seeking to relocate or open new industries will have representatives visiting this campus.

Therefore, students are encouraged to dress neatly and cleanly. Each instructor has the right to ask a student to leave his class, shop, or clinical experience area if the student's personal appearance or attire is objectionable to the other students or if this attire can be construed to be hazardous to safe operations.

Required program uniforms must fit neatly in order for the student to meet the dress code of both the College and the clinical facilities. There are certain areas in health programs (i.e. operating room, obstetrics, isolation rooms) located in the hospitals that require special hospital garments. Any student unable to wear and be covered by these garments will not be allowed in those clinical areas.

PARKING REGULATIONS

Visitors are welcome on the campus of Forsyth Technical College. Designated visitor parking areas will be indicated by campus signs. Any visitor receiving a ticket should return it to the person or office visited.

Students planning to park on campus are required to purchase a parking decal at the time of registration. Specific rules governing parking will be issued upon vehicle registration and may be found in the current issue of the Student Handbook.

USE OF FACILITIES

The buildings and their contents exist solely for the education of our adult population. The use of the facilities for any other purpose is strictly prohibited. Any use of these facilities for personal gain will result in immediate disciplinary action.

Smoking is prohibited in all classrooms, laboratories, and shops.

Animals are prohibited inside the buildings. Any animal on the campus grounds must be on a leash in compliance with the City of Winston-Salem Leash Law Ordinance Section 3-18.

Children are not allowed in classrooms or shop areas during class sessions, nor may they be left unattended in the library, canteen areas, or on campus grounds.

COMMENCEMENT EXERCISES

Commencement exercises are held at the end of spring and summer quarters on the dates published in the academic calendar. Degrees and diplomas are awarded at this time. Students are expected to notify the Records Office as to their intention to participate in the exercises. There is a $10.00 graduation fee that must be paid prior to filing an intent to graduate with the Records Office.

COMMENCEMENT MARSHALS

Marshals are selected from full-time rising sophomores who have maintained the highest scholastic averages during their freshman year. The two marshals who have the highest academic averages are named chief marshals.

STUDENT ACTIVITY FEE

It is the policy of this College that a student activity fee be charged. The activity fee for curriculum students will be collected during each quarter's registration according to the following schedule:

12 or more credit hours	$5.00
6 to 11 credit hours	$4.00
less than 6 credit hours	$1.00

The use of such a student fee is at the discretion of the Board of Trustees upon recommendation of the President. In general, these fees are used for student-centered activities and for the general benefit of the student body. Student activity fees are not refundable for any reason.

BOOKS AND SUPPLIES

Textbooks and supplies are not furnished by the College but are the responsibility of the student and may be purchased at the College's bookstore. The cost of books and supplies varies from program to program and from quarter to quarter.

UNIFORMS

Uniforms and other special wearing apparel shall be paid for by the students.

The initial cost of uniforms and special equipment for students in the various health programs ranges to approximately $200.00 depending upon the program.

The cost of uniforms and equipment is estimated and subject to change. Students should inquire for details during the admission interviews.

OTHER FEES

No laboratory, breakage, or property damage fees will be charged to students. However, in case of breakage or damage due to gross negligence or maliciousness, a student will be expected to reimburse the College. Academic credit and official transcripts may be withheld until proper payment is made.

LIABILITY INSURANCE FOR HEALTH STUDENTS

All health students must purchase liability insurance before they will be permitted to enter the hospitals for clinical practice. The cost of the insurance may range from $14.00 upward depending on the insurance carrier and must be purchased at the beginning of the fall quarter or the quarter a student enters or reenters a health program.

TUITION REFUNDS/HOLDS

Tuition is not refundable. Exception will be considered where the cause of withdrawal is completely beyond the student's control, such as serious illness, death in family, and job transfer. In such cases, two-thirds of the tuition paid may be refunded only if the student withdraws and submits a request within ten calendar days after the first day of classes. If a student withdraws from a course or courses, but remains enrolled in the College, he will receive no refund for the course dropped unless the College is at fault in causing the withdrawal/drop. Refunds of five dollars ($5.00) or less will not be made except for classes cancelled by the College. It is the student's responsibility to request a tuition refund for classes cancelled by the College.

A student who must withdraw may submit a request that his tuition be held. A request for a tuition hold will be considered when the cause is completely beyond the student's control. If the request is granted, the tuition will be credited to his account so that it may be applied toward costs for any one of the following four quarters.

Fees other than tuition cannot be refunded or held for later quarters. Statements from employers or doctors may be required before requests for refunds or holds are processed. A tuition hold may not be converted to a tuition refund or a refund to a hold after review by the Dean of Student Services and the Vice President of Business Affairs.

SCHOOL RINGS AND PINS

Any student in good standing who has completed at least one-half of the credit hours required for graduation in his/her curriculum may order the official school ring. The student is required to pay a deposit at the time the ring is ordered, with the balance due upon delivery.

Pins for health programs are also available. Orders for both pins and rings may be placed through the College bookstore.

TUITION AND FEES

The College receives funds from local, state and federal sources. Tuition charges are set by the State Board of Community Colleges and are subject to change without notice.

Tuition:

12 quarter hours or more	$75.00 per quarter
Less than 12 quarter hours	$6.25 per quarter hour
Late registration fee	$5.00

No tuition is charged for noncredit classes in the Continuing Education Division. However, registration fees of $8.00 to $20.00 may be charged. No tuition or fee is charged for Adult Basic Education courses. Normal tuition rates will apply if courses are taken in the ILC for curriculum credit. No tuition is charged for individuals age 65 and over. Instructional materials fees and supply fees are set to meet instructional needs in certain types of classes. Many Business classes carry a $10.00 supply fee.

Summer sessions and audit fees are charged at the same rate as those shown above.

OUT OF STATE RESIDENCY

A student who is not a legal resident of North Carolina must pay non-resident tuition. A person is not deemed eligible for the resident rate of tuition unless he has established and maintained his legal residence in North Carolina for at least twelve months prior to enrollment. Currently, out-of-state tuition is $58.50 per quarter hour or $702.00 per quarter for a full-time student. Residence for tuition purposes is determined at the time of admission and approval.

Students who are in doubt as to their status as a resident should request clarification by consulting the Office of Student Services before registration. Students may appeal their residence for tuition status to the Dean of Student Services.

STUDENT FINANCIAL SERVICES

Financial aid provides financial assistance to students who would otherwise be unable to continue their education. The financial need of a student is determined by the resources available to the student in relation to educational expenses.

Students applying for financial aid should complete and mail the American College Testing Program Family Financial Statement (F.F.S.) to the appropriate address. This form should be completed no later than May 1 preceding the academic year for which aid is requested. As financial aid awards are for only one academic year, students must reapply each year. Requests after May 1 will be processed as long as funds are available.

To be eligible for financial assistance, a student must be enrolled or accepted for enrollment and demonstrate a need for financial aid. Financial assistance is available in a variety of forms to help students who are eligible. Scholarships, loans, grants, and workstudy may be used singly or in combination to meet a student's total need.

Financial aid brochures containing more detailed information are available in the Office of Student Financial Services.

NOTE: In order to continue participation in any of the following financial aid programs, a student must be enrolled at least halftime and maintain satisfactory academic progress standards. Students should be familiar with these standards as published in the Student Financial Aid Handbook and the Student Handbook.

GRANTS

PELL Grants

The PELL Grant program is a Federal Aid Program designed to provide financial assistance to those who need it to attend post-high school educational institutions. The one-year awards normally range between $200 and $1350. Students may apply by completing the ACT Family Financial Statement or the Application for Federal Student Aid. Applications may be obtained at the Office of Student Financial Services. Students should allow six weeks for processing.

Supplemental Educational Opportunity Grant

The Supplemental Educational Opportunity Grant (SEOG) is funded by the federal government and is for students of exceptional financial need who, without a grant, would be unable to continue their education.

North Carolina Student Incentive Grant

The North Carolina Student Incentive Grant (NCSIG) is designed for students of exceptional financial need who are North Carolina residents. Students applying for the NCSIG must do so before March 15.

COLLEGE WORKSTUDY

Workstudy is a federally supported program through which students, primarily from low income families, are given preference for part-time employment (up to 20 hours per week). Students must be enrolled at least halftime to apply for workstudy and maintain satisfactory academic progress.

LOANS

The Office of Student Financial Services maintains a file of sources of financial aid for students. Loans at a low rate of interest are available through the following agencies:

North Carolina Insured Student Loan Program
North Carolina Student Loan Program for Health, Science and Mathematics
Sloan S. Sherrill Nursing Loan Fund
Taylor Student Nurse Loan*
Winston-Salem Foundation*
Winston-Salem Hospitals Consortium Nursing Student Loan Fund
*Available to Forsyth County residents only.

North Carolina Insured Student Loan Program

Legal residents of North Carolina, who have been accepted for enrollment or are enrolled in good standing and maintain satisfactory progress, may borrow up to $2,500 or one-half the estimated cost of education per year through College Foundation, Inc. Loans are insured by the State Education Assistance Authority and the United States Office of Education pays the 8 percent interest during the in-school and grace periods. Application must be made through the College's Office of Student Financial Services.

Sloan S. Sherrill Nursing Loan Fund

The Sherrill Nursing Loan is an interest-free loan made through Forsyth Technical College for second-year Associate Degree Nursing students. For more information and applications, students should contact the Office of Student Financial Services.

Winston-Salem Hospitals Consortium Nursing Student Loan Fund

Associate Degree Nursing students entering their third quarter may apply for a $1,500 nursing loan. The loan is repaid by service in one of the four hospitals in Winston-Salem. Interested students should contact the Office of Student Financial Services.

SCHOLARSHIPS

Students are encouraged to contact the Office of Student Financial Services for additional information and application criteria for the scholarships listed below.

The RJR Archer Scholarship is awarded annually to an outstanding student entering the second year of Manufacturing Engineering Technology, Electronic Engineering Technology, and Mechanical Drafting & Design Technology.

The R. D. Boyer Scholarship Fund is awarded annually, based on financial need, to a student pursuing a career in construction occupations.

The Carolina Telephone & Telegraph Scholarship is awarded annually to two students. Priority is given to unemployed and/or minority students.

The Corn Products Scholarship is awarded annually to students entering the second year of a business related curriculum. The scholarship is for Forsyth County residents and is based on academic ability and financial need.

The Data Processing Management Association Scholarship is awarded annually to an outstanding student entering the second year of Business Computer Programming.

The Mary Kate Dixon Horticultural Scholarship is awarded annually to an outstanding student entering the second year of Horticulture Technology.

The Forsyth County Medical Auxiliary awards scholarships to students entering the Associate Degree Nursing and allied health programs. The awarding of these scholarships is not controlled by the College.

The Norman Gaddis Scholarship is sponsored by the Student Government Association. It is primarily an emergency scholarship for students eligible for financial aid when funds are not available from other sources.

The Integon Scholarship is awarded annually to a deserving Executive Secretarial Science student and is based on need, academics, and good citizenship.

The Sandra Johnson Memorial Scholarship is awarded annually to an outstanding student entering the second year of Executive Secretarial Science.

The Marshall Paul Johnston Scholarship is a perpetual scholarship available to Automotive Mechanics students.

The Stratford Kiwanis Club sponsors a scholarship for students enrolled at Forsyth Technical College. Priority is given to graduating seniors with a handicap. The awarding of this scholarship is not controlled by the College.

The Winston-Salem Kiwanis and the Twin City Kiwanis Clubs award scholarships to seniors graduating from Forsyth County schools each year. The awarding of these scholarships is not controlled by the College.

The Mary B. Lauerman Memorial Scholarship is awarded annually to a full-time student with the highest cumulative grade point average entering the second year of Associate Degree Nursing.

The McPhail Scholarship fund is sponsored by the Pilot Club of Winston-Salem, Inc. and is awarded annually to women attending Forsyth Technical College. The awarding of these scholarships is not controlled by the college.

The Modern Machine Scholarship is awarded annually to a deserving student in the welding curriculum and is based on academics and need.

The Jane Gaither Murray Scholarship is awarded annually to a deserving student entering the Associate Degree Nursing curriculum.

The North Carolina Community College Scholarship is awarded annually to twenty-two students. Priorities are given to unemployed and/or minority students.

The North Carolina Sheriff's Association Scholarship is awarded annually to a student enrolled in the Law Enforcement curriculum. Priority is given to dependents of law enforcement officers.

The North Carolina Society of the American Association of Respiratory Therapy Incorporated Scholarship is awarded annually to one student in North Carolina entering the second year of Respiratory Therapy. Students who wish to apply should contact the department chairperson of Respiratory Therapy.

The Lynne Breedlove O'Rourke Memorial Scholarship is awarded annually to an outstanding student entering the second year of Radiologic Technology.

The Mr. & Mrs. Henry F. Snyder, Sr. Scholarship fund is used primarily as an emergency scholarship for students eligible for financial aid when funds are not available from other sources.

The Southern Bell Telephone & Telegraph Scholarship is awarded annually to two students. Priority is given to applicants with highest financial need and applicants whose job skills have become obsolete due to economic recession.

The Wachovia Technical Scholarship is awarded annually to two students who are enrolled full time in the second year of a technical curriculum and is based on need and scholastic promise.

The Louise G. Wilson Scholarship is available to poverty level Forsyth County residents who are accepted or enrolled in the vocational or technical programs.

Other than the scholarships listed above, there are various individuals and organizations who contribute money yearly for scholarships for needy students. Most of the money available is not restricted; however, some of the scholarships are restricted to individuals enrolled in specific programs.

OTHER SOURCES OF AID

Other sources of aid not administered by the College are available for eligible students. Interested students should apply with the appropriate agency. The Office of Student Financial Services can assist the students in making the initial contact with the sources listed below:

North Carolina Veterans Affairs Scholarships
North Carolina Vocational Rehabilitation
North Carolina National Guard Tuition Assistance Plan
Job Training Partnership Act (JTPA)
Dependency and Indemnity Compensation (VA)

VETERANS' BENEFITS

The College is approved for the training of persons eligible for benefits administered by the Veterans Administration (VA).

The Admissions Office will help applicants select a program of study and explain the procedures for enrolling in the College. All admission requirements must be completed before veterans' paperwork can be started. Admissions will require application forms, testing, and the receipt and evaluation of transcripts for all prior training.

Once the admissions procedures are completed, the eligible person should contact the Office of Student Financial Services to begin benefits processing. The actual enrollment certification and related documents will not be submitted to the VA Regional Office until the new student registers for classes.

Hours of Pay

Veterans' benefit payments are issued monthly and are based on training for a prescribed number of hours.

Enrollees in two-year technical programs are classified according to the number of credit hours per quarter.

Full-time	12 or more credit hours
¾ time	9-11 credit hours
½ time	6-8 credit hours

Enrollees in one year vocational programs are classified according to the number of weekly contact hours per quarter:

Full time	a minimum of 22 contact hours
¾ time	a minimum of 16 contact hours
½ time	a minimum of 11 contact hours

Standards of Progress

Federal regulations require that students receiving veterans' benefits must maintain standards of academic progress and conduct.

Satisfactory Academic Progress

The Academic Standing section of this catalog describes the basic academic requirements for all students. A 2.00 cumulative grade point average must be maintained and a probationary period of not more than one quarter is permitted. Progress is reviewed on a quarterly basis and performance in the major subject areas and preparatory/refresher classes are considered as well.

If a veteran or eligible person is classified as making unsatisfactory progress, a report will be submitted to the Veterans Administration and benefits will be terminated. Termination will take place effective with the posting of grades at the end of the probationary quarter. Recertification will not be made until satisfactory progress has been established by the veteran regaining a 2.00 cumulative grade point average. Students must request recertification in writing to the Director of Student Financial Services following the quarter in which satisfactory progress has been reached.

Satisfactory Conduct

Conduct in accordance with the section on Student Conduct and Responsibilities is expected of all students. Dismissal of veterans or eligible persons for unsatisfactory conduct will be reported to the Veterans Administration and benefits will be terminated.

Satisfactory Attendance

All students are expected to maintain satisfactory attendance as defined in the secton on Attendance. Eligible persons dropped from classes for nonattendance, poor attendance, or those who withdraw, will be terminated or have their hours reduced effective with the last day present in class. Unless special circumstances are involved, the Veterans Administration may determine this termination or reduction to be an overpayment retroactive to the beginning of the quarter.

Complete withdrawals for two consecutive quarters will be considered unsatisfactory attendance resulting in benefits being terminated. Benefits can be reinstated by satisfactorily attending a complete quarter without certification. Certification will be done retroactively for this quarter upon veteran's request.

Punitive/Nonpunitive Grades

Federal regulations prohibit payment for grades that do not count as progress toward graduation. Audits are not payable. A grade of "WF" is punitive because it counts as an "F" in grade point average computations. A grade of "W" or "WP" is nonpunitive. If an eligible person receives a grade which reduces his/her training time, a report is submitted to the Veterans Administration. In the case of punitive grades, the effective date of adjustment is the last day present in class. In the case of nonpunitive grades, the effective dates of adjustment will be an overpayment retroactive to the beginning of the quarter, unless special circumstances are involved.

Counseling Services and Other Information

Students may contact the Office of Student Financial Services concerning availability of counseling services or come directly to the Counseling Center in the Office of Student Services.

Questions concerning standards of progress/conduct should be directed to the Office of Student Financial Services.

Questions concerning eligibility, enrollment, curriculum changes, withdrawals, attendance, pay problems, or information in general should be directed to the Office of Student Financial Services.

There is a veterans information booklet available which contains more detailed information concerning the various requirements for receipt of benefit payments.

ORGANIZATIONS AND ACTIVITIES

STUDENT GOVERNMENT ASSOCIATION — SGA

The Student Government Association serves to promote interest in student affairs both on and off campus. The association is composed of all students who pay the student activity fee. Four representatives are elected from each instructional division to serve on the Executive Council. Representatives to the Executive Council elect the Student Government Association officers from within the Executive Council. The Student Activities Facilitator serves in an advisory capacity to the Student Government Association.

STUDENT REPRESENTATION ON BOARD AND COMMITTEES

The President of the Student Government Association is a nonvoting member of the Board of Trustees of the College. Student representatives also serve on the Student Appeals Committee, the Graduation Committee, and other College committees concerned with students.

STUDENT ACTIVITIES

Forsyth Technical College strives to offer its students more than an academic education. Efforts are made to provide students with extracurricular opportunities for involvement that will help to educate the total individual. By providing extracurricular activities. Forsyth Technical College is recognizing that a college education includes social, professional, and cultural involvement as well as academic. We invite you to come by the Student Activities Office in Snyder Hall and find out more about what Forsyth Technical College has to offer outside the classroom.

ARCHITECTURAL TECHNOLOGY CLUB

The Architectural Technology Club of Forsyth Technical College serves to promote architectural education, to recognize outstanding academic achievement, and to provide related services to FTC and the community. All students enrolled in the Architectural Technology curriculum are invited and encouraged to join.

DATA PROCESSING MANAGEMENT ASSOCIATION

The Data Processing Management Association (DPMA) Student Chapter provides the Electronic Data Processing students with opportunities to interact with professionals and to explore career opportunities in the data processing field. Members of DPMA have opportunities to learn more about data processing through regularly scheduled meetings of the students, attendance at the local chapter meetings and field trips to local computer facilities.

HANDICAPPED AWARENESS CLUB

The Handicapped Awareness Club was organized to provide a support group for the handicapped students at Forsyth Technical College and to acquaint other students, faculty, and staff with both the needs and abilities of the handicapped. Monthly meetings are open to any fee-paying FTC student but only handicapped students are eligible to hold office.

LAW ENFORCEMENT ADMINISTRATION SOCIETY (LEAS)

Membership in LEAS is open to any student who is, or has been enrolled in a course of study in the administration of criminal justice.

The objectives of the organization are to promote public understanding of the problems and objectives in the administration of criminal justice and to evaluate the standards of, and foster greater understanding between, the agencies and departments in all areas of the administration of criminal justice.

STUDENT PRACTICAL NURSE ORGANIZATION

The Student Practical Nurse Organization originated in 1983, and its membership is composed of students in this curriculum. Its purpose is to provide opportunities for students to benefit Forsyth Technical College, the Practical Nurse Education curriculum, and nursing in the community.

STUDENT CHAPTER OF THE SOCIETY OF MANUFACTURING ENGINEERS

The Student Chapter of the Society of Manufacturing Engineers is a service and social club open to students from the Manufacturing Engineering Technology and Mechanical Drafting and Design Technology programs. This club has raised and set aside funds for endowing a scholarship open to second quarter students in these two fields of technology.

SOCIETY OF RESPIRATORY THERAPY STUDENTS (SRTS)

The purpose of the SRTS is to increase community awareness of respiratory therapy, promote student fellowship, improve academic achievement, and generally enhance the educational experience of respiratory students.

OTHER ORGANIZATIONS

Students are encouraged to affiliate with student chapters of various professional and technical organizations and societies.

STUDENT USE OF WEST CAMPUS GYMNASIUM FOR ACTIVITIES

Forsyth Technical College's West Campus gymnasium is available for students' use. Weight rooms housing weight machines and free weights are located in both the men's and women's locker rooms. Students may check out sports equipment for use in the gymnasium by presenting their current student indentification card. Hours for gymnasium use will be posted and are subject to change each quarter.

ATHLETICS

The College does not offer a formal, organized athletic program. The students, with the assistance of the Student Activities Facilitator, have organized basketball, softball, and bowling teams and compete in Winston-Salem city leagues in these sports.

STUDENT PUBLICATIONS

The Reporter is the student newspaper written, edited, and managed by the student staff with the assistance of the Student Activities Facilitator. Students are encouraged to participate actively in the preparation of the FTC Reporter.

The **Students' Monthly** is an information sheet for students. It contains information on campus events, schedule changes, and other information of interest to students. It is distributed at the beginning of each month.

STUDENT SERVICES

GUIDANCE AND COUNSELING SERVICE

Counseling Center

The Office of Student Services maintains a staff of professional counselors, whose services are available to students needing help with educational, vocational, financial, social, or personal problems from the time they enter school until they leave. Assistance is provided to facilitate wise choices, decisions, and adjustments associated with being a student. The counselors also serve as consultants to faculty and staff in helping to meet the educational needs of students. The counselors are available to both day and evening students in the Counseling Center; during the day at the Allied Health Building; and on a specified posted schedule at the Paramedical Building.

Several individualized tests and inventories are available for counseling purposes, and students are referred to appropriate community agencies or resource persons when it is apparent that they can be assisted more effectively in this manner.

Career Guidance Center

The services of the Career Guidance Center are available to applicants and students of Forsyth Technical College and to other members of the community who need assistance with career planning. Emphasis is placed on activities such as developing and teaching career planning, career counseling, development of decision-making skills, maintenance of a useful career information library, and providing microfiche cataloging and computer information on the Employment Security Commission job bank.

Placement Office

The Placement Office is another important service for students. This office exists to assist graduates, as well as current students, find suitable employment. The office maintains and posts current job openings available in the local area. The Placement Office provides assistance in the preparation of resumes and cover letters, as well as the development of interviewing skills, through the use of individual sessions, video taped materials and workshops. The office is open 8 a.m. to 5 p.m. Monday, Wednesday, and Friday; and 5 p.m. to 9 p.m. Thursday; or by appointment.

AUXILIARY STUDENT SERVICES

Housing

Since the College has no dormitory facilities, students who wish to live away from home must make their own housing arrangements. The College takes no responsibility for locating or supervising student housing; however, suggestions as to location of off-campus housing may be obtained in the Counseling Center.

Health Services

Limited health services are provided through the Office of Student Services and first-aid supplies are located in shop areas; however, injuries requiring more than minor first-aid will be treated in the emergency room of either Forsyth Memorial Hospital or North Carolina Baptist Hospital.

For major illness or injury, ambulance transportation is available to either of the two hospitals, both of which are located within two miles of the College.

Accident Insurance

Accident insurance covering the hours a student is in school, on field trips, or participating in student activities, is provided to all full-time and part-time curriculum students. This student insurance is furnished by the College as a service to students, but it is not meant to replace a student's personal coverage.

Food Service

Canteen service is available in the student centers located in Hauser Hall, Snyder Hall, and at West Campus. A variety of food and drink is available. Canteen service is also available in both the student lounge in the Allied Health Building and the student lounge in the Paramedical Building at Forsyth Memorial Hospital.

Student Centers

Large, attractive student centers are located in Snyder Hall, Hauser Hall and at West Campus. Students are encouraged to use the centers as places in which to meet, talk, eat, and relax. A study lounge is also available next to the bookstore in Snyder Hall for a quiet place to study. Student lounges are also available to students in the health programs in the Allied Health Building and in the Paramedical Building at Forsyth Memorial Hospital.

Lost and Found Services

Lost and found articles will be handled by the public safety office in the Parkway Building on the main campus. On other campuses, the library at the Allied Health Building and the Dean's office, and at Forsyth Memorial Hosptial, the department chairperson's office. All lost articles of value should be reported to the public safety office on the main campus, Ext. 244.

Telephone Calls to Students

Students may not receive telephone calls or messages at the College except in the case of an emergency. Forsyth Technical College does not have the facilities to forward general messages to students. Please ask relatives, friends and associates not to contact you at the College. In case of an emergency, however, our staff will make every effort to relay information to students. Those calling in an emergency will be asked to state the nature of the emergency, give a name and a return telephone number.

We cannot guarantee the person calling that we can locate the student (not in class). Also, it is the policy of Forsyth Technical College to not give out identifying information about students to telephone callers and/or unidentified persons without the permission of the student.

BOOKSTORE

A school bookstore is operated by the College as a service to students, faculty, and staff. Textbooks, school supplies, and course-related materials, as well as other items of special interest to students, are offered for sale. The bookstore is adjacent to the student center in Snyder Hall and is open Monday through Friday from 9 a.m. until 3 p.m. and on Monday, Tuesday, and Thursday evenings from 6 p.m. until 8 p.m.

Summer quarter evening hours will be posted at the bookstore.

LIBRARIES

The three libraries contain approximately 30,750 books and audiovisual software. Accompanying audiovisual hardware is available for use in the libraries and classrooms.

Main Campus

Students have access to the library in the Administration Building which is open Monday through Thursday from 8 a.m. until 9 p.m. and on Friday from 8 a.m. until 4:30 p.m.

Although no fines are charged, students are responsible for replacing books that are lost or damaged. Until replacement is made, library privileges will be revoked, students will not be permitted to register, and students' records will be sealed.

Forsyth Memorial Hospital

Students have access to the library in the Forsyth Memorial Hospital Paramedical Building which is open from 8 a.m. to 5 p.m. Monday through Friday.

Allied Health Building

Students have access to the library on the first floor of the Allied Health building. It is open Monday through Thursday from 8 a.m. to 8 p.m. and on Friday from 8 a.m. to 5 p.m.

Library cards are given to new Allied Health students during library orientation. Should cards be lost, there is a $3.00 replacement fee. Each student is responsible for materials checked out on his/her card. Overdue fines are not imposed on books from the general collection; however, there is a 25 cents an hour fine (up to the cost of the book) on reserved books checked out overnight and due in one hour after the library opens.

The student is responsible for replacing books that are lost or damaged. Until such replacement is made, library privileges may be revoked, the student will not be permitted to register, and transcripts will be withheld.

INDIVIDUALIZED LEARNING CENTERS

FTC's Individualized Learning Centers provide a wide variety of services to FTC students and to the community. The learning center on the main campus is a curriculum support unit offering eithteen pre-technical and curriculum courses, supplemental work for various curriculum courses such as mathematics and English, preparation for the CGP (FTC's entrance exam), and tutoring services. A microcomputer and printer are available for student use for those working in the center and for those completing work for other classes within the College.

Both the learning center on the West Campus and the one in the main branch of the public library on Fifth Street offer courses in adult enrichment, English as a Second Language, adult high school, and CGP preparation. They are also used by persons preparing for the high school diploma equivalency test (GED). A fourth learning center is located in the Whitaker Rehabilitation Center affiliated with Forsyth Memorial Hospital.

Students in the learning centers work on a self-paced, individualized basis with a program designed exclusively for them according to their needs and goals. They also have access to an instructor for one-to-one instruction. Experience has shown that motivated, self-disciplined adults learn well using this approach.

Students wishing to take credit courses must pay the normal registration fee and enroll at the beginning of each quarter. Only students who are enrolled at Forsyth Technical College can take credit courses in the learning center. All other courses in the learning centers are free and students may enroll at any time.

Tutoring Services

Tutoring services provide assistance to Forsyth Technical College students who are experiencing academic difficulties. The main function of these services is to arrange one-on-one and group tutoring sessions. Selecting and training effective tutors, supplementing course materials with programmed instruction, and offering academic advising are the functions of tutoring services.

Tutors are recruited initially from the student body. In those areas where the demand for tutors cannot be met on campus, other qualified persons are considered for tutor positions. The College provides funding for tutor salaries without cost to the students who request tutorial assistance.

Credit Courses

To enroll in a credit course in the ILC, a student must first seek permission from his advisor. After planning his class course load with the advisor, the student brings the regular registration card to the ILC where he sets an attendance schedule with a curriculum instructor. A student must register for the course during the regular registration period and pay the regular curriculum tuition charges. A student should be cautioned about the measure of self-discipline necessary for achievement in this setting. ILC attendance policies and course requirements are as rigorous as those in the classroom.

The following courses are offered for credit in the ILC:

Medical Terminology I
Medical Terminology II
Business Mathematics
Vocabulary/Terminology I
Vocabulary/Terminology II
Filing
Principles of Supervision
Reading Improvement
English Basic Reading Skills III
English for International Students
Grammar Skills
Basic Arithmetic Skills
Pre-Business Math
Algebra (Pre-Tech)
Pre-Technical Math
Geometry
Fundamental Concepts of Math
Fundamentals of Math
Algebra

Some reasons for taking a course in the ILC are as follows:

1. The course is not scheduled and is needed as a prerequisite or for graduation
2. The course is offered *only* in the ILC, such as ENG 0023.
3. The student can complete the course at an unusually *fast pace.*
4. The student has failed the course in the classroom and needs to study at a *slower* pace.
5. The classroom course offering was cancelled, or there is a scheduling conflict with a classroom course.
6. Special accomodations.

NOTE: Veterans' benefits cover ***only*** ENG 0023.

High School Equivalency

Adult residents of North Carolina who have not completed high school may earn a high school diploma equivalency by passing a battery of five tests. These tests are known as either the high school diploma equivalency test or test of General Education Development (GED).

The GED program is designed primarily for adults 18 years or older; however, 16 and 17 year olds are allowed to take the test if they meet certain conditions. It is the policy of Forsyth Technical College to encourage young people to complete traditional public or private high school before seeking admission. Current residency in North Carolina is required.

A high school diploma equivalency is recognized across the nation by most employers and educational institutions and is issued by the North Carolina Department of Community Colleges. Forsyth Technical College is one of 71 official GED testing centers in the state and is the only one in Forsyth County.

Persons interested in further information or in taking the GED test should contact the Main Campus Individualized Learning Center. The center administers the test by appointment. There is a $5.00 fee for taking the GED test.

CHANGES IN REGULATIONS

All statements in this publication are announcements of present policies and are subject to change at any given time without prior notice. Forsyth Technical College reserves the right to make changes in program requirements and offerings, in regulations, and in fees. The College also reserves the right to discontinue at any time programs or courses described in this publication. While every effort will be made to give advance notice of any changes of programs or courses, such notice is neither guaranteed nor required. The College further reserves the right, at any time, to request the student to withdraw when it considers such action to be in the best interest of the student and for the College.

ADULT CONTINUING EDUCATION

The Adult Continuing Education Division of Forsyth Technical College provides appropriate, economical, and convenient learning opportunities for those citizens who are 18 years or older. The opportunities are based on individual need and previous educational achievement. They range from the first grade through high school and extend into vocational, technical, and general adult continuing education. Training is available to all of suitable age who wish to learn and can benefit from the instruction provided.

The Continuing Education Division provides a balanced educational program that encompasses a wide variety of course offerings that will meet the educational needs of employed and unemployed adults. The specific areas include Adult Basic Education, High School Diploma Program, Occupational Extension, New and Expanding Industry, Management Development Training, Academic, Avocational, and Practical Skills. New programs and/or courses are periodically developed when needs become apparent.

The primary goal of the Adult Continuing Education Division is to provide quality adult continuing education courses in convenient locations at a low cost for the citizens of Forsyth and Stokes counties.

The general program objectives are:

1. To provide expanded educational opportunities for those adults who would not otherwise continue their education.
2. To provide relatively inexpensive, nearby educational opportunities for high school graduates, school dropouts, and adults.
3. To provide programs of vocational/technical education for employed and unemployed adults who need training or retraining.
4. To provide short courses that will meet the general adult and community service needs of the people in the community.
5. To provide requested vocational and technical training programs for new and expanding industry in the Forsyth Technical College service area.

GENERAL INFORMATION

Adult Continuing Education courses are scheduled quarterly. Preregistration is required for all courses and programs. Preregistration can be accomplished by calling or coming by the Adult Continuing Education Office located on the West Campus at 1300 Bolton Street. Official registration takes place at the first class meeting. Registration is completed by filing the necessary registration forms and paying the required fees. The Registrar's office keeps an official record of achievement for each student enrolled in Adult Continuing Education. Approximately 40 percent of the courses are taught on the Forsyth Tech main campus and West Campus locations. The remainder are taught in various locations in the community. Many courses meet during the day; however, approximately 90 percent of courses meet during the evening hours and Saturday morning.

ADMISSIONS REQUIREMENTS

All persons who take Adult Continuing Education courses must be eighteen (18) years or older. However, selected high school juniors and seniors may enroll provided they have approval from their high school principal and Forsyth Technical College's Admissions Office. Enrollees should have completed the tenth grade in order to take courses other than Adult Basic Education and Adult High School courses.

COST

A registration fee is required for all Adult Continuing Education courses except the Adult Basic Education and Adult High School programs. Some courses have additional supply fee charges. Volunteer firemen, fire department personnel, volunteer rescue and lifesaving department personnel, local law enforcement officers, and persons sixty-five (65) or older are exempt from paying the registration fees.

CEU CREDITS

Most Adult Continuing Education courses that meet for the ten or more contact hours are approved for Continuing Education Units. C.E.U. credit is based upon the number of hours a course is scheduled to meet. One C.E.U. is awarded for every ten hours a person attends class and any portion thereof. (For example, a course that meets for 22 hours awards 2.2 C.E.U.'s.) Persons who complete the Management Development Training Program receive a diploma. A high school diploma is awarded to those persons who successfully complete the Adult High School Diploma Program.

OCCUPATIONAL EXTENSION PROGRAMS

The Occupational Extension programs and courses are designed to provide an opportunity for working adults to gain or to improve vocational/technical skills. The programs also serve the business and industrial community by upgrading the skills of employees.

The Occupational Extension Programs include:

1. **Management Development Training** is designed to train or upgrade supervisors, potential supervisors, small business owners, and management trainees in business and industry.
2. **Vocational/Technical Courses** are designed to upgrade skills and knowledge in certain occupational and technical areas. These courses also provide many adults with an opportunity to gain new skills.
3. **Fire Service Training** is designed to provide practical training in all areas of fire fighting, to assist new volunteer fire departments in training personnel, and to provide upgrade training for the personnel of existing volunteer fire departments.
4. **Seminars and Workshops** are developed for the purpose of providing specialized training for particular groups.
5. **Law Enforcement Training** is designed to train personnel in basic law enforcement and to provide upgrade training for persons who are currently employed in the profession.
6. **New and Expanding Industry Training** is designed to train individuals in specific skill areas for jobs created by new or expanding industries.
7. **Health Related Training** is designed to provide upgrade training to persons who are employed in health professions and prepare persons to become employed in the health related areas.

MANAGEMENT DEVELOPMENT TRAINING

Management Development Training (MDT) is an educational program designed to upgrade the competency of supervisory and mid-management personnel in business and industry. Classes are scheduled in accordance with the needs of industry.

Supervisors or potential supervisors may qualify for an MDT Diploma by completing sixteen (16) courses. For supervisors pursuing the MDT Diploma, it is suggested that this program be planned to cover a two-year period. Most of the courses are taught during evening hours and occasionally on Saturday mornings.

Applicants for this program should presently be a supervisor or have ambitions to become a supervisor. There are no prerequisites for entry into the program. There are four required courses and most courses are scheduled to meet one night per week for eleven (11) weeks.

Listed below are course descriptions for some of the more popular Management Development training courses:

Art of Motivating and Leading People—Emphasis is placed on specific problems in the area of motivation. The course should provide self-evaluation for those attempting to motivate others. This course is also designed to acquaint people with some of the techniques of leadership and to develop in them some understanding and appreciation of human behavior and how employees develop attitudes about their jobs, their employers, and their supervisors.

Conference Leadership—This course is designed to train supervisors in the techniques and procedures of managing a group of people solving their collective and individual problems.

Introduction to Data Processing—This course is designed to introduce the student to basic terminology, concepts, and principles of business data processing and programming. Emphasis will be placed on basic ideas the student should master in preparation for learning a programming language.

Principles of Management—This course involves the definition, function, history, purpose, and scope of management. Also covered in the class will be schools of thought in administration and management, the management process (planning, organizing, staffing, directing, controlling, coordinating, and decision making), tools of administration (authority and communication), and administrative responsibility.

Principles of Supervision—This course is designed for the person who is in a supervisory capacity. Subjects covered will include: fundamentals of supervision, relationships on the job, communications, training workers, performance evaluation, grievances and discipline, absenteeism, job management, managing time, encouraging self-improvement, human relations, and motivation.

Speed Reading—This course is designed to improve the student's ability to read rapidly and accurately. Special machines are used for class drill to broaden the span of recognition, to increase eye coordination and word group recognition, and to train for comprehension in larger units.

See Adult Continuing Education General Course Listing for additional courses.

VOCATIONAL AND TECHNICAL COURSES

Courses in this program are occupationally oriented, providing adults with the opportunity to upgrade skills and knowledge in certain vocational and technical areas. This program includes upgrade training in such areas as drafting, health occupations, fire service training, and welding. It also gives the regular curriculum graduates of the College an opportunity to participate in a continuing education program after entering the world of work.

The following are course descriptions of some of the more popular vocational and technical extension courses:

Arc Welding Processes—A special arc welding course to include shielded metal arc welding (Stick), tungsten inert gas welding (TIG), and metal arc inert gas welding (MIG).

Auto Body Repair I—This course is an introduction to the history of automobile construction, body repair, hand tools, molding fasteners, and minor sheet metal repair procedures. No prerequisites.

Auto Tune-Up—This is a course designed for the car owner who would like to be able to perform a minor engine tune-up without having to invest a lot of money for testing equipment. This course will cover basic fundamentals of engine operation with emphasis placed on items such as distributors, ignition timing, carburetors, and many smaller items that assure a good engine tune-up.

Electronics, Electrical Fundamentals, Level I—This course will define basic units, volts, amperes, ohms, etc. It will investigate mathematical relationships as applied to electrical units. Ohm's law will be thoroughly covered. Electromagnetics and the operation of relays, motors, and generators (both AC and DC) will be discussed. Students will be introduced to electron theory and briefly how electron tubes and solid state devices operate. Students will be shown how to use basic electrical/electronics measurement devices. No prerequisites.

Digital Basics for Electronic Servicing I—This course will cover the type of components used extensively in control circuits and computer applications. It will start with the basics of binary numbers and progress through the development and application of microprocessors. The complete course will consist of two quarters. Prerequisite: A good working knowledge of solid state components or one year of electronic schooling.

Machine Shop Practices I—Basic machine shop practices will include the following: introduction to machine tools (drill press, lathe, milling machine, shaper, grinders, etc.), care and use of basic hand tools and measuring instruments, elementary layout and processes on lathe, drill press, and off-hand grinding of tools. Safety glasses required.

Major Home Appliance Repair I—This course is designed to familiarize persons with the proper operation of refrigerators, ranges, dishwashers, washers, and freezers. Students will be trained in troubleshooting techniques and repair which will involve the use of meters and circuit diagrams for each of the appliances mentioned above. Safety glasses required.

Mechanical Drafting & Sketching I—Instruction will include language of drawing, projections (orthographic, isometric, oblique), alphabet of lines, dimensioning and lettering, freehand sketching, and instrument drawing techniques.

Oil and Gas Burner Service—This course covers the following: oil burner fundamentals (operation, control, and service of oil burner systems); installing and servicing electric heating elements and their controls; principles of operating, installing, and servicing hot water and low pressure systems. Safety glasses required.

See Adult Continuing Educational General Course Listings for additional courses.

FIRE SERVICE TRAINING

Fire Service Training is designed to provide practical training in areas of fire prevention and fire fighting. Courses are offered primarily to new volunteer fire department personnel. Upgrade training courses are provided for personnel who are already volunteers participating in fire departments and for professional fire fighters who are employed by the City of Winston-Salem. Fire Training Service courses are provided to professional and volunteer firemen free of charge.

Persons interested in further information regarding these courses should call or come by the Adult Continuing Education Office, West Campus.

SEMINARS AND WORKSHOPS

Seminars and workshops are developed for the purpose of providing specialized training and educational programs for specific groups and organizations. Seminars and workshops have been conducted in the areas of hotel-motel management, energy conservation, cosmetology, occupational safety and health, and visual emission control.

LAW ENFORCEMENT TRAINING

The primary thrust in law enforcement education has been through the Law Enforcement part of entrance level training for public safety officers. In addition, this same training is offered to the Forsyth County Sheriff's Department. This 240 hour course was established by the North Carolina Justice Academy and includes 35 law enforcement topics. It is a mandatory minimum standard for basic police training in North Carolina. It is designed to provide the newly employed law enforcement officer with basic job knowledge, skills, and abilities to perform entry level police work. The material includes constitutional law, the North Carolina Criminal and Motor Vehicle Law, traffic accident investigation and reporting, basic laws of arrest, search and seizure, evidence, patrol operation, firearms, and defensive tactics.

In addition to the 11 weeks of law enforcement, entrance level training for public safety officers includes ten weeks of fire suppression, three weeks of emergency medical, and five weeks of behavioral science.

NEW AND EXPANDING INDUSTRY TRAINING

The Adult Continuing Education Division participates in the creation of more challenging and rewarding jobs for the citizens in our community by providing a customized training service to new or expanding industries. In cooperation with the Industrial Services Division of the Department of Community Colleges, Forsyth Technical College, will design and administer a special program for training the production manpower required by any new or expanding industry. The purpose of the program is to assist these industries in meeting their immediate manpower needs and in developing long range training programs of their own to satisfy their continuing replacement and retraining needs.

This program includes the following services:

1. Consultation in determining job descriptions, defining areas of training, and prescribing appropriate course outlines, training schedules, and materials.
2. Selection and training of instructors and providing instructional services for the duration of the training program.
3. Provision of suitable space for a temporary training facility (prior to the completion of the new plant) including the installation costs of equipment in the temporary training facility.

SMALL BUSINESS EDUCATION CENTER

The Small Business Education Center offers workshops, short courses, counseling and referrals to small business owners and people who are considering starting a business of their own. Workshops and short courses include: Prebusiness Workshop, Developing a Business Plan, Home-Based Businesses, Salesmanship, Dressmaking for Profit, Business Management for Day Care Operators, Selling to the Government, Record Keeping for Small Business, Marketing and Advertising, Women's Roundtable.

Free counseling is available on a continuing basis by the Retired Executive Volunteers who advise clients on business management, planning, marketing and record keeping.

HEALTH-RELATED TRAINING PROGRAM

Health-related training is designed to provide upgrade training to persons in the health professions and to assist persons in preparing themselves to become experienced in health-related areas. This training provides the student with entry level job skills.

The courses are designed to upgrade as well as update knowledge and skills in specific areas. Courses are also offered to provide training for professionals who have not practiced in several years, enabling them to reenter their profession with competence.

Listed below are course descriptions for some of the popular Health-related training courses:

Cardiopulmonary Resuscitation (CPR) & Advanced First Aid—This course is designed for those persons who wish to expand their knowledge of first aid such as fire rescue squad and emergency personnel. Upon satisfactory completion of this course, the student will be awarded an American Red Cross Advanced First Aid and Emergency Care Certificate. The student will be certified in CPR by the American Heart Association. Standard First Aid is not a prerequisite for this class.

Emergency Medical Technician (EMT)—The purpose of this course is to prepare professional and volunteer EMT personnel to take the state examination for certification. It is jointly sponsored by Forsyth Technical College and the North Carolina Office of Emergency Medical Services. The course is approximately 96 hours in length including both classroom and lab instruction.

Homemaker—Home Health Aid—This course provides training in the skills necessary to assist the home-bound individual with personal hygiene, companionship, and provision of a safe and clean environment. The psychological aspects of aging will be a major emphasis throughout the course.

Licensed Practical Nurse (L.P.N.) Refresher—This course is designed to prepare the L.P.N. who has been out of nursing for a number of years to go back to work with the necessary skills. There is a total of 90 classroom hours and 90 clinical training hours. The main areas of instruction will include general medical and surical nursing, experience with the functions of the L.P.N., and L.P.N.'s relationship to the health team.

Medical Terminology—Students taking this course will acquire a working knowledge of terms encountered in medicine. The course will also orient the student to the use of reference books dealing with medical terminology.

Nursing Assistant—The purpose of this course is to provide those who are genuinely interested in patient care with the opportunity to acquire a basic understanding of the principles involved and to develop skills necessary to assist the nurse in providing safe, efficient, and effective patient care. There is an introduction to basic scientific principles, the structure and function of the human body, and the changes which illness and aging produce. Approximately one-third of the course time is spent working in the hospital. The clinical time gives the student the opportunity to relate to patients and their families, to develop skills in performing nursing procedures, and to become a functioning part of the nursing team.

Registered Nurse (R.N.) Refresher—This course is designed to prepare the R.N. who has been out of nursing for several years to return to work. The course includes general medical and surgical nursing, new equipment, procedures, charting, documentation, medications, I.V. therapy, and physician's orders. Students will be allowed to perform patient care under the direct supervision of the instructor.

Unit Secretary—This course is designed to prepare a person to work as a unit secretary in either a hospital or nursing home. The student is trained to keep and maintain clerical items and up-to-date records of patient procedures in a readable and usable form for doctors and nurses to perform patient treatments. Some of the areas covered include medical and drug terminology, scheduling surgery and special procedures, telephone techniques, receptionist's duties, and the intercom.

Venipuncture Technician—This program is designed to train students to collect lab specimens for analysis. The program consists of two eleven-week sessions of instruction. During the first eleven weeks, the student will receive classroom instruction in anatomy and physiology and human relations. The second eleven-week period provides classroom instruction in principles and practice of specimen collection and medical communication skills. During this session the student will also be involved in clinical training. Upon successful completion of both the classroom and clinical instruction, the student will be awarded an appropriate certificate.

See Adult Continuing Education General Course Listings for additional courses.

AVOCATIONAL AND PRACTICAL SKILLS

The general adult enrichment program is designed to meet the avocational needs of individuals in the community. Individuals have an opportunity to broaden their educational base by taking courses tailored to their personal interest, growth, and development. The various courses are offered during the day and evening hours. Although the courses are avocational in nature, some students find the courses beneficial in their specific occupations.

Listed below are course descriptions for some of the more popular courses:

Acrylic Painting—The students start by using a picture or photograph to paint from, then progress to composing original paintings. Instruction includes how to blend colors, how to obtain depth, and how to soften colors so they are not raw. Still lifes will be arranged for painting; field trips may be scheduled.

Cake Decorating—Emphasis will be placed on decorating equipment and its use. The course will also emphasize the decorating of birthday, anniversary, and special occasion cakes.

Macrame—Basic macrame knots will be learned in constructing knotted projects such as jewelry, plant holders, wall hangings, and articles of clothing such as belts, vests, and other apparel.

Oil Painting—This is an introductory course to oil painting. Included are acquisition of materials, basic understanding through lecture, accomplishment of one complete oil painting, and a realistic study of still life.

Sewing: Clothing Construction I—The student will receive instruction in selecting proper pattern size, fabric selection, and operation of the sewing machine. A garment will be constructed in class. This class is for the beginner.

Upholstery—This course is designed for nonprofessional persons who wish to learn to upholster. Students must bring a small upholstered chair to practice the principles learned in class.

Wallpaper Hanging—This course will make the student aware of the different types, quality, and patterns in wall coverings. It will provide demonstrations and limited practice in removing old wallpaper and preparation for covering and pasting up paper.

See Adult Continuing Education General Course Listings for additional courses.

ACADEMIC PROGRAM

The Academic Extension Program encompasses the areas of the Adult High School Diploma Program and other academic programs.

ACADEMIC COURSES

The Academic Extension Program offers a variety of one quarter terminal courses designed for self-interest and self-development. Classes are usually conducted one day or two evenings per week. These courses offer students an opportunity for self-improvement in cultural and avocational areas.

Calligraphy—The art of italic handwriting will be taught. Included in instruction will be writing tools and materials required, the care of the tools, the proper posture and pen hold necessary, the proper letter strokes, the joining of letters, and pen lifts and spacing.

Financial Management—Where does your money go?—This course is designed to aid individuals in identifying all aspects of financial management. Investments, taxes, insurance, living expenses, and credit will also be discussed.

French, Conversational—This course will teach the basics of French so the student may travel and visit comfortably in a French-speaking country. Basic vocabulary and conversation related to hotel, shopping, transportation, directions, and restaurant matters will be stressed. Individual student needs will be considered. Culture will be discussed as it pertains to dealing with people of the French-speaking countries.

Income Tax—This course involves the study and application of the federal and state income tax system. Emphasis will be placed upon gathering the data necessary for preparation of tax forms, i.e. 1040. Actual preparation and deductions will be completed in class.

Managing Your Personal Assets—This course, designed in a seminar format, includes basic information on money, interest rates, various savings and investment vehicles, tax shelters, retirement plans, and estate planning. Students are taught and encouraged to begin the development of a personal financial plan.

Manual Language I—This is a course for hearing people who have a need or desire to communicate or improve their communication with the deaf. Instruction is given in basic manual communications with the deaf including language of signs and finger spelling.

Real Estate Exam Prep., Brokers—This course is designed to prepare applicants for the North Carolina Licensing Exam for Real Estate Salesmen and Brokers. The course will cover real estate fundamentals, law, appraising, brokerage, finance, and closing procedures.

Real Estate Exam Prep., Salesmen—For adults who need to prepare only for the salesmen's portion of the state exam, this course meets two nights each week for six weeks. Persons taking this course MUST have a sponsor in order to take the state exam.

Real Estate, Math—This course will stress basic skills in mathematics with practical problem solving exercises directly related to real estate computations. This course is for the students preparing for the North Carolina Real Estate Licensing Exam.

Religion: The Early Christian Church—The purpose of the course is to explore the origins and history of our present-day Christian movements and denominations. The course is intended to answer questions that have arisen as to **why** and **how** Christianity is divided into many churches. By attempting to answer these questions, the student can hopefully begin to see the oneness that is in all Christian traditions. Also, such an understanding will no doubt help one to accept the differences among denominations and to appreciate their contributions to religious, societal, and cultural developments. The period covered will be from the First Century A.D. through the Sixteenth Century Protestant Reformation. Students will study culture and history from the standpoints of impact upon personalities and teachings, and in turn, the impact that these personalities and theologies have made upon history, culture, and society.

Wills, Trusts, & Probate—A basic course to help an individual to understand the purpose of a will, its effect on one's property, and the effect of not having a will. The course will deal with probate, responsibility of a personal representation, and taxation in regard to wills. The second part of the course deals with establishment of trust and its use to an individual.

See Adult Continuing Education General Course Listings for additional courses.

ADULT HIGH SCHOOL DIPLOMA PROGRAM

Forsyth Technical College, in cooperation with the Winston-Salem/Forsyth County School System and Stokes County School System, offers day and evening courses for high school credit to adult students who wish to obtain an adult high school diploma. Courses are taught at Forsyth Technical College West Campus and South Stokes High School.

Classes meet weekly during the day and evening hours. There may be slight variations in time. Each class meets a total of 6 hours per week for 11 weeks. Students may carry as many as 4 courses per quarter. A total of 19 courses is needed to complete the program. A passing score on the high school competency test is required before graduation. No student will receive credit for a course if cumulative absence and/or tardies total more than 6 hours. Late enrollment will represent absences.

Generally, persons to be enrolled must be 18 years or older. Under certain circumstances, however, 16 and 17 year olds may be enrolled by special permission. These applicants must still meet the requirements as set forth in state guidelines. Each enrollee must have completed the eighth grade in an accredited school or the eighth grade level in the Adult Basic Education Program conducted by the Department of Community Colleges.

Information regarding eligibility, courses needed for graduation, and registration for classes can be obtained from the Admissions Office at Forsyth Technical College between 8 a.m. and 8 p.m., Monday through Thursday, and between 8 a.m. and 5 p.m. Friday.

Registration is free; however, students must furnish their own books and supplies.

Transcripts of work completed will be furnished by the Registrar's Office on written request of the student.

ADULT BASIC EDUCATION PROGRAM

The purpose of the Adult Basic Education Program is to provide the education for the uneducated or undereducated adult with less than an eighth grade education. The program is designed for those adults over 18 years of age whose inability to speak, read, or write the English language makes it difficult for them to find jobs or remain in their present jobs.

The primary objectives of the program are as follows:

1. to enable these adults to become less dependent on others;
2. to enhance their ability to benefit from other occupational training;
3. to increase their opportunities for better and more rewarding jobs;
4. to make them better able to meet their adult responsibilities;
5. to allow them to obtain an eighth grade educational level.

Adult Basic Education classes are held at various locations throughout Forsyth and Stokes counties. Classes are conducted during the day and evening hours. Classes usually meet two nights per week, three hours per night. No fees are charged to the student, and all books and materials are supplied free of charge.

ADULT CONTINUING EDUCATION

GENERAL COURSE LISTINGS

Absenteeism and Turnover Reduction	33 hours
Abusive Use of Drugs	22 hours
Accounting, Basic I	66 hours
Accounting, Basic II	33 hours
Acrylic Painting	33 hours
Acrylic Painting, Advanced	33 hours
Activity Coordinator Training	52½ hours
Adolescent Psychology	33 hours
Adult Growth and Parent Education (AGAPE)	24 hours
Adventures in Attitudes	30 hours
Affirmative Action: A Practical Approach for Employers	14 hours
Aging Process	6 hours
Air Conditioning Service I	44 hours
Air Conditioning Service II	44 hours
Air Conditioning Systems, Central	44 hours
Alcohol and Drug Abuse	22 hours
Algebra, Intro. to College	33 hours
Algebra I, Fundamentals of	55 hours
Amateur Radio License Preparatory	99 hours
Anatomy and Physiology (Venipuncture)	33 hours
Antiques	27½ hours
Appliance Service	44 hours
Art Activity for Young Children	30 hours
Art History	22 hours
Art of Motivating and Leading People	33 hours
Assertiveness Training	18 hours
Audio-Visual Techniques	30 hours
Auto Body Repair I	44 hours
Auto Body Repair II	44 hours
Auto Body Repair III	44 hours
Auto Familiarization	44 hours
Auto Tune-Up	44 hours
Auto Tune-Up	88 hours
Automotive Air Conditioning Service I	33 hours
BASIC Programming, Introduction to	33 hours
Basketweaving with Cane	33 hours
Basketweaving and Chair Caning	33 hours
Basketweaving with Pine Needles	33 hours
Batik and Japanese Art	33 hours
Beyond Separation and Divorce	22 hours

Bidding and Estimating for Construction Trades	33 hours
Blueprint Reading and Measuring Instruments for all Trades	44 hours
Blueprint Reading, Architectural	44 hours
Boating Skills and Seamanship	27½ hours
Bricklaying I	88 hours
Bricklaying II	88 hours
Building a Child's Self-Concept	33 hours
Business Law	33 hours
Business Letter Writing	33 hours
Business Math	33 hours
Cabinet Making, Introduction to	33 hours
Cake Decorating	33 hours
Calligraphy	33 hours
Candlewicking	33 hours
Cardiology, Basic	33 hours
Career and Life Planning	33 hours
Careers in Hotel/Motel Operations	33 hours
Ceramics, Handbuilt	33 hours
Ceramics, Advanced	33 hours
Ceramics, Beginning	33 hours
Ceramics, Intermediate	33 hours
Chair Caning	33 hours
Challenges of Later Life	33 hours
Child Abuse	20 hours
Child Psychology	33 hours
Childhood—The Enchanting Years	22 hours
Choral Music and Voice	33 hours
Cognitive Development for Young Children	10 hours
Color TV Repair	66 hours
Commercial Art I	33 hours
Commercial Art II	33 hours
Communication Skills for Better Relationships	22 hours
Communication Skills for Couples	10 hours
Communications, Effective	33 hours
Communications: Overcoming the Fear of Public Speaking	22 hours
Computer Graphics I	88 hours
Computer Graphics II	88 hours
Conference Techniques for Supervisory Personnel	33 hours
Cooking and Nutrition	33 hours
Cooking: Basic	33 hours
Cooking: German	33 hours
Cooking: Gourmet, the Easy Way	33 hours
Cooking: Holiday	33 hours

Cooking; Home Baking, Bread	33 hours
Cooking: microwave	33 hours
Cooking: Natural Food (Menu Planning with Natural Foods)	33 hours
Cooking: Protein without Meat	33 hours
Copper Tooling—Tin Tooling	33 hours
Coronary Care and EKG	33 hours
Cardiopulmonary Resuscitation (CPR)	12 hours
CPR and Standard First Aid	30 hours
CPR Instructor's Course	15 hours
CPR Maintenance Workshop	6 hours
Crafts, Holiday (& Decorations)	33 hours
Credit and Collection Skills	25 hours
Creating Activities for Young Children	33 hours
Crewel and Crosstitch	33 hours
Crewel Embroidery	33 hours
Crochet Lace	33 hours
Crocheting	33 hours
Current Events	44 hours
Custodial Techniques for Lead Housekeepers	33 hours
Cultural Awareness in Child Development	10 hours
Data Processing, Introduction to	44 hours
Death and Dying	22 hours
Decorative Tole Painting	33 hours
Decorative Tole (In Oils)	33 hours
Decorative Tole, Country Collectibles	33 hours
Decoupage	33 hours
Developmental Education	99 hours
Diabetes Care	18 hours
Digital Circuit Analysis	33 hours
Dollmaking (Porcelain & Ceramic)	44 hours
Dollmaking (Soft Sculpture)	33 hours
Drafting, Mechanical and Sketching I	66 hours
Drafting, Mechanical and Sketching II	66 hours
Drafting, Sheet Metal	44 hours
Dramatic Play	10 hours
Drawing, Figure	33 hours
Drawing, Freehand	33 hours
Drawing, Freehand II	33 hours
Easy Living or New Homemaker	22 hours
Economics for Business and Industry	33 hours
Effectiveness Training for Women	33 hours
Electrical Apprenticeship I	144 hours
Electrical Apprenticeship II	144 hours
Electrical Apprenticeship III	144 hours
Electrical Apprenticeship IV	144 hours

Electrical Code, National	25 hours
Electricity, Basic (For Electronic Servicing)	66 hours
Electrocardiology for Nurses (EKG)	10 hours
Electronic Calculators	22 hours
Electronics, Basic for Radio and TV Repair	66 hours
Electronics, Electronical Fundamentals, Level I	66 hours
Electronics, Semi-Conductor Control Devices, Level II	66 hours
Electronics, Control Device Applications and Troubleshooting, Level III	66 hours
Electronics, Linear IC's and Applications, Level IV	66 hours
Electronics, Digital Fundamentals, Level V	66 hours
Electronics, Digital Circuit Applications, Level VI	66 hours
Electronics, Computer Systems, Level VII	66 hours
Emergency Care Skills for Occupational Health Nurse	30 hours
Emergency Medical Technician (EMT)	96 hours
EMT Coordinator Workshop	12 hours
EMT Recertification	30 hours
Employee Guidance and Counseling	33 hours
Energy Conservation Management	12 hours
English as a Second Language	66 hours
English Review for Secretaries	33 hours
Environment for Artistic Development	10 hours
Exploratory Art	33 hours
Family and the Handicapped Child	27 hours
Family Budgeting	12 hours
Family Dynamics	33 hours
FCC Telephone Operators License Prep. I	99 hours
Financial Analysis for Small Businessmen	33 hours
Financial Management—Where Does Your Money Go?	12 hours
Fire Apparatus Practices	(vary)
Fire Behavior and Portable Fire Extinguishers	(vary)
Firefighting Procedures	(vary)
First Aid, Advanced	54 hours
First Aid, Advanced Recertification	24 hours
First Aid, Multimedia	8 hours
First Aid, Standard	18 hours
First Aid, Standard and CPR	30 hours
Flower Arranging	33 hours
Flower Making	33 hours
Fluid and Electrolytes	33 hours
Food Service Worker	22 hours
Forcible Entry	(vary)

French, Conversational	55 hours
Furniture Finishing and Refinishing	33 hours
GED Preparation	66 hours
Geometry, Descriptive	33 hours
Geriatric Nursing	22 hours
German, Conversational	44 hours
Greenhouse Management	33 hours
Greenhouse Operation and Horticulture	220 hours
Gross Motor Development of Young Children	10 hours
Ground School, Commercial Pilot	33 hours
Ground School, Co-Pilot	22 hours
Ground School, Instrument Pilot	66 hours
Ground School, Private Pilot	66 hours
Home Health, Basic	33 hours
Home Maintenance and Repair	33 hours
Homemaker—Home Health Aid	40 hours
Hose Practices	(vary)
Hospital Ward Clerk/Unit Secretary	212½ hours
How to Build a House (Lecture)	22 hours
How to Get Along with Your Child	22 hours
How to Sit for the Handicapped (Handi-sitters)	33 hours
How to Take Charge of Your Life	33 hours
How to Train Employees	33 hours
Human Relations in Business and Industry	22 hours
Human Relations (Venipuncture)	30 hours
Human Relations in Nursing	22 hours
Human Resources Development	33 hours
Human Psychology	22 hours
Income Tax, Personal	33 hours
Identifying Potential Managers and Supervisors	33 hours
Industrial Engineering, Introduction to	30 hours
Industrial Fire Protection	(vary)
Industrial Control and Motor Controls, Part I	75 hours
Industrial Control and Motor Controls, Part II	75 hours
Industrial Control and Motor Controls, Part II	75 hours
Insight Into Dealing with the Cancer Patient	18 hours
Instructor Training	(vary)
Interior Decorating	27½ hours
IV Fluids and Electrolyte Balance	10 hours
Journalism, Introduction to	33 hours
Knitting	33 hours
Labor Laws for Supervisors	22 hours
Ladder Practices	(vary)
Lampshade Making and Decorating	33 hours
Landscaping, Basic	33 hours
Landscaping, Advanced	33 hours

Law for Consumer Protection	22 hours
Law for Laymen	22 hours
Leadership for Nurses	22 hours
Legal Aspects of Nursing	6 hours
Local History and Genealogy	42 hours
LPN Refresher	180 hours
Machine Shop Practice I	88 hours
Machine Shop Practice II	88 hours
Machine Shop Practice III	88 hours
Macrame	33 hours
Major Home Appliance Repair	(vary)
Management by Objectives	22 hours
Management, Principles of	33 hours
Managing Time	22 hours
Managing Time and Performance Evaluation	22 hours
Manual Language I	33 hours
Manual Language II	33 hours
Marketing, Principles of	33 hours
Marriage and the Family	22 hours
Medical Communication Skills (Venipucture)	33 hours
Medicine Machine Transcriptions	50 hours
Medical Terminology	33 hours
Menu Planning and Buying	33 hours
Metric Conversions	33 hours
Metrics	22 hours
Microprocessor Fundamentals and Applications	33 hours
Millinery (Hat Making)	33 hours
Motor Carrier Rates	44 hours
Muzzleloading Gun Building	33 hours
Needle Art	33 hours
Needle Art, Advanced	33 hours
Newspaper in Education (NIE)	33 hours
Notary Public	4 hours
Nursing Assistant (day class)	220 hours
Nursing Assistant (evening class)	123 hours
Nursing for Homemakers	22 hours
Nutrient Environment for Infant and Toddler Development	10 hours
Nutrient and Weight Loss	22 hours
Nutrition Education	8 hours
Nutrition for Improved Health	3 hours
Nutrition on a Budget	22 hours
Office Supervision	33 hours
Offset Camera I	44 hours
Offset Camera II	44 hours
Offset Printing	44 hours

Oil and Gas Burner Service	44 hours
Oil Painting, Advanced	33 hours
Oil Painting, Beginning	33 hours
Oil Painting, Intermediate I	33 hours
Oil Painting, Intermediate II	33 hours
Old Trunk Restoration	33 hours
Oriental Brush Stroke	33 hours
OSHA Law and Industrial Safety for Supervision	33 hours
Over-the-Counter Drugs—Friend or Foe?	33 hours
Pen and Ink	33 hours
Personnel Accreditation Preparation	24 hours
Pharmacology Refresher	33 hours
Photography I	33 hours
Photography II	30 hours
Photography III	22 hours
Photomaking: Film making in Super 8/16 mm	33 hours
Physical and Language Development Programs for Handicapped Children	22 hours
Physical Assessment	36 hours
Physical and Mental Health Screening	10 hours
Pillow Finishing	33 hours
Pine Needle—Baskets and Crafts	33 hours
Planning for a Successful Career	33 hours
Plaster Crafting	33 hours
Plumbing Code Regulations and Application, N.C. Code	33 hours
Portraits, Charcoal	33 hours
Portraits, Oil	33 hours
Portraits, Pastel	33 hours
Preparation for Parenthood	18 hours
Preservation of Antique and Vintage Clothing	33 hours
Problem Solving and Decision Making	22 hours
Professional Engineering Review	45 hours
Professional Retail Salesmanship	25 hours
Protective Breathing Equipment and other Protective Equipment	(vary)
Provisions for Exceptional Children	10 hours
Psychological Development of Pre-school Children	20 hours
Psychology, Adolescent	(vary)
Psychology of Aging	22 hours
Psychology of Astrology	33 hours
Psychology of Life and Work	33 hours
Psychology, Social	33 hours
Quality Control	22 hours
Quilting	33 hours
Quilting, Advanced	33 hours
Quilting, Boutique	33 hours

Radio Repair	66 hours
Real Estate Exam Preparation, Brokers	96 hours
Real Estate Exam Preparation, Salesmen	36 hours
Real Estate, Math	33 hours
Refrigeration Service I	44 hours
Religion: The Early Christian Church	22 hours
Residential Management	33 hours
Residential Wiring	33 hours
Respiratory and Hemodynamic Monitoring	33 hours
R.N. Refresher	250 hours
Role of the Day Care Teacher	10 hours
Room Arrangement in Day Care Centers	10 hours
Safety Management	33 hours
Salvages and Overhaul Practices	(vary)
Sculpture, Clay	33 hours
Secretarial Procedures	33 hours
Sewing: Advanced (Fitting I)	33 hours
Sewing: Advanced (Fitting II)	33 hours
Sewing: Bedspread Making	33 hours
Sewing: Clothing Construction I	33 hours
Sewing: Clothing Construction II	33 hours
Sewing: Drapery Making	33 hours
Sewing: Men's and Ladies' Jackets	33 hours
Sewing: Millinery (Hat Making)	33 hours
Sewing Novelties with Ultrasuede	33 hours
Sewing: Pattern Drafting II	44 hours
Sewing: Pillow Finishing	33 hours
Sewing: Stretch Fabrics and Lingerie	33 hours
Sewing: Tailoring (Custom)	33 hours
Sewing: Tailoring (Modified)	33 hours
Sewing: Tailoring (Modified and Simulated Suede)	33 hours
Sheet Metal Layout and Fabrication I	88 hours
Sheet Metal Layout and Fabrication II	88 hours
Sheet Metal Layout and Fabrication III	88 hours
Shop Math	33 hours
Shorthand, Gregg I	66 hours
Shorthand, Gregg II	66 hours
Shorthand, Gregg Refresher	30 hours
Shorthand, Gregg Speed in Dictation	33 hours
Shorthand, Speedbuilding for all Notetakers	33 hours
Shorthand, Speedwriting I	66 hours
Shorthand, Speedwriting II	33 hours
Signed English I	33 hours
Signed English II	33 hours
Skills for Pre-School Teachers	33 hours

Small Business and the Federal Bankruptcy Act	22 hours
Small Business Marketing Skills	22 hours
Small Engine Repair	66 hours
Smocking	33 hours
Sociological Aspects of Aging or Social Gerontology	33 hours
Sociology of Juvenile Delinquency	30 hours
Solar Energy, Introduction to	22 hours
Solar Design, Passive	22 hours
Solar Greenhouse Design and Construction	35 hours
Spanish, Conversational I	44 hours
Spanish, Conversational II	44 hours
Spanish, Conversational III	44 hours
Speaking, Effective	22 hours
Speaking, Public	22 hours
Specimen Collection (Venipuncture)	33 hours
Speed Reading	33 hours
Stained Glass	33 hours
Starting Your Own Business	33 hours
Statistics, Introduction to	33 hours
Stenciling	33 hours
Step-Families—Yours, Mine, Ours	22 hours
Stock Market	22 hours
Stress Management	10 hours
Successful Advertising for Small Business	33 hours
Supervision, Principles of	33 hours
Surveying I	33 hours
Surveying II	33 hours
Swedish Weaving (Embroidery)	33 hours
Tatting	33 hours
Teaching for Independence in Young Children	10 hours
Technical Illustrating (Pictorial Drafting)	44 hours
Techniques for Performing a Complete Physical Examination	36 hours
Television Repair, Black and White	66 hours
Time and Motion Study	22 hours
Time Management	22 hours
Traffic Management	44 hours
Transactional Analysis, Introduction to	22 hours
Transactional Analysis, Advanced	22 hours
Travel and Tourism Occupations	30 hours
Trigonometry	22 hours
Turning Negative Stress Into Positive Experiences	22 hours
Typing I	66 hours
Typing II	66 hours

Typing, Personal	66 hours
Upholstery	33 hours
Using Your Mind Effectively	16 hours
Ventilation	(vary)
Wallpaper Hanging	15 hours
Wastewater Math, Advanced	18 hours
Wastewater Treatment Plant Operators Training	60 hours
Watercolor I	33 hours
Watercolor II	33 hours
Weaving	33 hours
Weight Control Through Habit Not Diet	22 hours
Welding, Advanced Shielded Metal Arc Welding (SMAW)	88 hours
Welding, Basic	88 hours
Welding, Basic Oxyacetylene	88 hours
Welding, Basic Arc	44 hours
Welding, Basic Arc	88 hours
Welding, Gas Metal Arc (MIG)	88 hours
Welding, Gas Tungsten Arc	88 hours
Welding, Inert Gas (TIG and MIG)	88 hours
Welding, Introduction to Nuclear Pipe	88 hours
Welding, Introduction to Pipe	44 hours
Wills, Trusts, Probate	22 hours
Woodcarving	33 hours
Woodworking	33 hours
Woodworking I	33 hours
Woodworking II	33 hours
Word Processing Concepts	24 hours
Writing, Creative	25 hours
Writing, Effective	22 hours

ASSOCIATE IN APPLIED SCIENCE DEGREE PROGRAM

The curricula described on the following pages are technical in nature and, upon completion, will award the Associate in Applied Science degree. This degree is recognized nationally to indicate the successful completion of two years of education beyond the high school level.

The listing of courses for each curriculum is shown in the proper sequence; consequently, applicants should plan their attendance to be over 21 or 24 consecutive months.

The College's purpose is to offer the technical courses which will prepare the graduate for immediate employment opportunities. Therefore, the ability to transfer to other institutions of higher education, and transfer credit granted, will be determined by the receiving institution.

Sample Course Listing

			C	L	P (or CE)	QH
ENG	102	COMPOSITION	3	0	0	3
Course Prefix	Course Number	Course Title	Classroom Hours per week	Laboratory Hours per week	Practicum per week (Practical application or clinical experience per week.)	Quarter Hours Credit

Contact Hours per week

ACCOUNTING T-016

The purpose of the Accounting curriculum is to prepare the individual to enter the accounting profession through study of accounting principles, theories and practices with related study in law, finance, management and data processing operations.

The curriculum is designed to prepare the individual for entry-level accounting positions, such as junior accountant, bookkeeper, accounting clerk, cost clerk, payroll clerk and related data processing occupations.

With experience and additional education, the individual will be able to advance to positions such as systems accountant, cost accountant, budget accountant and property accountant.

Job Opportunities:

Entry Level	**Advanced Level**
Accountant	Budget Accountant
Estimator	Cost Accountant
Bookkeeper I	Property Accountant
Bookkeeping-Machine Operator I	Systems Accountant
Accounting Clerk	Bookkeeper II
	Bookkeeping-Machine Operator II

Total credit hours: 110

Curriculum by Quarters

Course Title			**Hours per Week**			
			C	**L**	**P**	**QH**
FIRST QUARTER						
BUS	102	Typewriting I	2	0	3	3
BUS	109	Business Mathematics	5	0	0	5
BUS	120	Accounting I	4	0	3	5
ENG	100	Oral Communication	3	0	0	3
			14	0	6	16
SECOND QUARTER						
BUS	121	Accounting II	4	0	3	5
ECO	102	Economics I	3	0	0	3
EDP	101	Principles of Business Data Processing	3	2	0	4
ENG	101	Introduction to Written Communication	3	0	0	3
			13	2	3	15
THIRD QUARTER						
BUS	122	Accounting III	4	0	3	5
BUS	210	Business Statistics	5	0	0	5
BUS	229	Taxes	2	0	3	3
ECO	104	Economics II	3	0	0	3
ENG	102	Composition	3	0	0	3
			17	0	6	19

FOURTH QUARTER

BUS	123	Business Finance	5	0	0	5
BUS	221	Intermediate Accounting I	5	0	0	5
BUS	230	Advanced Taxes	2	0	3	3
EDP	103	Introduction to Microcomputing DOS	3	0	0	3
			15	0	3	16

FIFTH QUARTER

BUS	115	Business Law I	3	0	0	3
BUS	222	Intermediate Accounting II	5	0	0	5
BUS	280	Business Applications for the Microcomputer	2	0	3	3
ENG	205	Business Report Writing	3	0	0	3
			13	0	3	14

SIXTH QUARTER

BUS	116	Business Law II	3	0	0	3
BUS	225	Managerial Cost Accounting I	2	0	3	3
BUS	227	Intermediate Accounting III	2	0	3	3
ENG	206	Communications	3	0	0	3
PSY	206	Applied Psychology	3	0	0	3
			13	0	6	15

SEVENTH QUARTER

BUS	224	Advanced Accounting	2	0	3	3
BUS	226	Managerial Cost Accounting II	2	0	3	3
BUS	269	Auditing	2	0	3	3
BUS	272	Principles of Supervision	3	0	0	3
		Elective	3	0	0	3
			12	0	9	15

ARCHITECTURAL TECHNOLOGY T-041

The Architectural Technology curriculum provides individuals with knowledge and skills that will lead to employment and advancement in the field of architectural technology. Technical courses are included which will enable the graduate to advance into related areas of work as job experience is obtained or to continue toward an advanced degree in an associated field of technology.

Architectural technicians translate the architect's design sketches into complete and accurate plans and drawings for construction purposes. The technician will be involved in work requiring a knowledge of drafting, construction materials, mechanical and structural systems, estimating, building codes, and specifications.

Initial employment opportunities exist with architectural and engineering firms, private utilities, contractors, and municipal governments.

Job Opportunities:
Architectural and Construction Related Drafting Technician
Building Code Inspector
Estimator
Field Inspector (Buildings)
Construction Supervisor
Delineator
Model Builder
Building Materials Sales Representative

Total credit hours: 120

Curriculum by Quarters

Course Title			Hours per Week C	L	P	QH
FIRST QUARTER						
ARC	106	Architectural Drafting I	2	0	6	4
ARC	181	History of Architecture and Construction	5	0	0	5
DFT	151	Computer Graphics I	2	0	0	2
MAT	101	Technical Mathematics I	5	0	0	5
			14	0	6	16
SECOND QUARTER						
ARC	107	Architectural Drafting II	2	0	6	4
ARC	152	Computer Aided Drafting I	2	6	0	5
CIV	105	Architectural Materials and Methods	3	0	0	3
ENG	101	Introduction to Written Communication	3	0	0	3
MAT	102	Technical Mathematics II	5	0	0	5
			15	6	6	20

THIRD QUARTER

AHR	106	Architectural Mechanical Equipment	3	0	3	4
ARC	108	Architectural Drafting III	0	0	9	3
ARC	153	Computer Aided Drafting II	2	2	0	3
MAT	103	Technical Mathematics III	5	0	0	5
PHY	111	Physics - Mechanics	3	2	0	4
			13	4	12	19

FOURTH QUARTER

ARC	150	Site Planning	2	0	6	4
ARC	154	Computer Aided Drafting III	1	2	0	2
ECO	102	Economics I	3	0	0	3
MEC	104	Applied Mechanics	5	0	0	5
PHY	113	Physics - Electricity	3	2	0	4
			14	4	6	18

FIFTH QUARTER

ARC	220	Architectural Drafting IV	2	0	9	5
ENG	102	Composition	3	0	0	3
MEC	205	Strength of Materials	3	2	0	4
PSY	206	Applied Psychology	3	0	0	3
			11	2	9	15

SIXTH QUARTER

ARC	221	Architectural Drafting V	2	0	9	5
ARC	235	Codes, Specifications, and Contract Documents	3	0	3	4
ARC	240	Computer Aided Drafting Applications	1	4	0	3
ENG	103	Technical Report Writing	3	0	0	3
			9	4	12	15

SEVENTH QUARTER

ARC	222	Architectural Drafting VI	2	0	9	5
ARC	236	Construction Estimating and Field Inspecting	3	0	3	4
ARC	241	Systems Management on Micro and Mini Computers	1	0	0	1
ENG	100	Oral Communication	3	0	0	3
PHY	114	Physics - Light and Sound	3	2	0	4
			12	2	12	17

ASSOCIATE DEGREE NURSING T-059

The Associate Degree Nursing curriculum is designed to prepare graduates to integrate the principles and theories of nursing and the sciences in utilizing the nursing process in the practice of nursing. The practice of nursing by associate degree nursing graduates consists of: (1) assessing the patient's physical and mental health, including the patient's reaction to illness and treatment regimens; (2) recording and reporting the results of the nursing assessment; (3) planning, initiating, delivering, and evaluating appropriate nursing acts; (4) teaching, delegating to or supervising other personnel in implementing the treatment regimen; (5) collaborating with other health care providers in determining the appropriate health care for a patient; (6) implementing the treatment and pharmaceutical regimen prescribed by any person authorized by State law to prescribe such a regimen; (7) providing teaching and counseling about the patient's health care; (8) reporting and recording the plan for care, nursing care given, and the patient's response to that care; and (9) supervising, teaching, and evaluating those who perform or are preparing to perform nursing functions.

Graduates are eligible to take the National Council Licensure Examination (NCLEX-RN) which is required for practice as a registered nurse.

Individuals desiring a career in registered nursing should take biology, algebra and chemistry courses prior to entering the program.

Job Opportunities:
Registered Nurse

Total credit hours: 112

Curriculum by Quarters

Course Title			Hours per Week			
			C	L	CE	QH
FIRST QUARTER						
BIO	107	Anatomy and Physiology I	3	2	0	4
BUS	141	Medical Vocabulary and Terminology	3	0	0	3
NUR	119	Pharmacology	2	2	0	3
NUR	120	Medical-Surgical Nursing I	4	2	6	7
			12	6	6	17
SECOND QUARTER						
BIO	108	Anatomy and Physiology II	3	2	0	4
NUR	122	Medical-Surgical Nursing II	5	2	6	8
NUT	101	General Nutrition	3	0	0	3
SOC	103	Sociology	3	0	0	3
			14	4	6	18

THIRD QUARTER

BIO	111	Microbiology	3	2	0	4
NUR	124	Medical-Surgical Nursing III	4	2	12	9
PSY	101	Psychology	3	0	0	3
			10	4	12	16

FOURTH QUARTER

BIO	112	Pathology	3	0	0	3
ENG	101	Introduction to Written Communication	3	0	0	3
NUR	126	Medical-Surgical Nursing IV	5	0	12	9
PSY	110	Lifespan Psychology	3	0	0	3
			14	0	12	18

FIFTH QUARTER

ENG	102	Composition	3	0	0	3
NUR	216	Maternity Nursing	4	0	12	8
		or		or		
NUR	218	Pediatric Nursing	4	0	12	8
			7	0	12	11

SIXTH QUARTER

ENG	103	Technical Report Writing	3	0	0	3
NUR	216	Maternity Nursing	4	0	12	8
		or		or		
NUR	218	Pediatric Nursing	4	0	12	8
PSY	111	Abnormal Behavior	3	3	0	3
			10	0	12	14

SEVENTH QUARTER

NUR	200	Seminar	3	0	0	3
**NUR	220	Medical-Surgical Nursing V	4	0	18	5
		(½ quarter) and		and		
**NUR	222	Medical-Surgical Nursing VI (½ quarter)	4	0	18	5
		or		or		
**NUR	224	Psychiatric Nursing (½ quarter)	6	0	12	5
			9	0	18	13

EIGHTH QUARTER

**NUR	222	Medical-Surgical Nursing VI (½ quarter)	4	0	18	5
		or		or		
**NUR	224	Psychiatric Nursing (½ quarter)	6	0	12	5
			6	0	18	5

*Some students will be enrolled in Medical-Surgical Nursing VI during the 7th quarter and others will complete it during the 8th quarter. Some students will be enrolled in Psychiatric Nursing during the 7th quarter and others in the 8th quarter.

**This is a short session of five weeks.

BANKING AND FINANCE T-112

The purposes of the Banking and Finance curriculum are: (1) to prepare the individual to enter the banking and finance industries, (2) to provide an educational program for the banking employees wanting to receive the American Institute of Banking certificate, and (3) to provide an educational program to upgrade or retrain individuals presently employed in the banking or finance industry.

These purposes will be fulfilled through study in areas such as banking and finance principles, theories and practices; teller operations; lending and collections procedures, financial analaysis, marketing and public relations.

This curriculum will provide the opportunity for an individual to enter a variety of banking or finance jobs in retail banks, commercial banks, government lending agencies, mortgage banks and credit companies.

Job Opportunities:

Entry Level	**Advanced Level**
Accounting Clerk	Branch Manager
Teller	Departmental Manager, Advertising
General Clerk	Departmental Manager, Budget
Collector and Adjuster	Departmental Manager, Personnel and Training
	Banking Staff Assistant

Total credit hours: 111

Curriculum by Quarters

Course Title			**Hours per Week** C	L	P	QH
FIRST QUARTER						
AIB	202	Principles of Banking	4	0	0	4
BUS	102	Typewriting I	2	0	3	3
BUS	109	Business Mathematics	5	0	0	5
ENG	100	Oral Communication	3	0	0	3
			14	0	3	15
SECOND QUARTER						
AIB	209	Installment Credit	4	0	0	4
BUS	120	Accounting I	4	0	3	5
EDP	103	Introduction to Microcomputing DOS	3	0	0	3
ENG	101	Introduction to Written Communication	3	0	0	3
			14	0	3	15

THIRD QUARTER

AIB	236	Trust Functions and Services	4	0	0	4
BUS	115	Business Law I	3	0	0	3
BUS	121	Accounting II	4	0	3	5
ECO	102	Economics I	3	0	0	3
ENG	102	Composition	3	0	0	3
			17	0	3	18

FOURTH QUARTER

AIB	231	Savings and Time Deposit	4	0	0	4
BUS	116	Business Law II	3	0	0	3
BUS	122	Accounting III	4	0	3	5
ECO	104	Economics II	3	0	0	3
			14	0	3	15

FIFTH QUARTER

AIB	205	Bank Management	4	0	0	4
BUS	128	Personal Financial Management	5	0	0	5
ENG	205	Report Writing	3	0	0	3
PSY	206	Applied Psychology	3	0	0	3
			15	0	0	15

SIXTH QUARTER

AIB	203	Bank Investments	4	0	0	4
BUS	209	Real Estate Finance	5	0	0	5
BUS	229	Taxes	2	0	3	3
ENG	206	Communications	3	0	0	3
			14	0	3	15

SEVENTH QUARTER

AIB	235	Loan and Discount	3	0	0	3
AIB	239	Marketing for Bankers	4	0	0	4
BUS	210	Business Statistics	5	0	0	5
BUS	272	Principles of Supervision	3	0	0	3
BUS		Elective	3	0	0	3
			18	0	0	18

BUSINESS ADMINISTRATION T-018

The Business Administration curriculum is designed to prepare an individual for entry into middle-management occupations in various businesses and industries. The curriculum provides an overview of the business and industrial world—its organization and management.

The purpose of the curriculum will be fulfilled through courses designed to develop competency in: (1) understanding the principles of organization and management in business operations, (2) utilizing modern techniques to make decisions, (3) understanding the economy through study and analysis of the role of production and marketing, (4) communicating orally and in writing and (5) interpersonal relationships.

Through these skills and through development of personal competencies and qualities, the individual will be able to function effectively in middle-management activities in business or industry.

Job Opportunities:

Entry Level
Purchasing Agent
Sales Manager
Public-Relations Representative
Sales-Service Promoter
Training Representative
General Supervisor
Credit Card Operations Manager
Operations Officer
Loan Officer
Volunteer Services Supervisor
Customer Services Manager
Residence Supervisor

Advanced Level
Personnel Manager
Credit and Collection Manager
Customer Service Manager
Branch Manager
Production Superintendent
Traffic Manager
Credit Union Manager
Housing Project Manager
Market Manager
Loan Counselor
Office Manager
Department Manager
Warehouse Manager

Total credit hours: 111

Curriculum by Quarters

Course Title			Hours per Week C	L	P	QH
FIRST QUARTER						
BUS	101	Introduction to Business	5	0	0	5
BUS	102	Typewriting I	2	0	3	3
BUS	109	Business Mathematics	5	0	0	5
ENG	100	Oral Communication	3	0	0	3
			15	0	3	16
SECOND QUARTER						
BUS	120	Accounting I	4	0	3	5
ECO	102	Economics I	3	0	0	3
EDP	101	Principles of Business Data Processing	3	2	0	4
ENG	101	Introduction to Written Communication	3	0	0	3
			13	2	3	15

THIRD QUARTER

BUS	115	Business Law I	3	0	0	3
BUS	121	Accounting II	4	0	3	5
ECO	104	Economics II	3	0	0	3
ENG	102	Composition	3	0	0	3
			13	0	3	14

FOURTH QUARTER

BUS	116	Business Law II	3	0	0	3
BUS	229	Taxes	2	0	3	3
BUS	239	Marketing	5	0	0	5
EDP	103	Introduction to Microcomputing DOS	3	0	0	3
BUS	122	Accounting III	4	0	3	5
			17	0	6	19

FIFTH QUARTER

BUS	128	Personal Financial Management	5	0	0	5
BUS	232	Sales Development	3	0	0	3
ENG	205	Report Writing	3	0	0	3
PSY	206	Applied Psychology	3	0	0	3
EDP	104	Personal Word Processing	3	0	0	3
			17	0	0	17

SIXTH QUARTER

BUS	243	Advertising	4	0	0	4
BUS	280	Business Application for the Microcomputer	2	0	3	3
ENG	206	Communications	3	0	0	3
EDP	152	Financial Spreadsheet Operations	3	0	0	3
BUS		Elective	3	0	0	3
			15	0	3	16

SEVENTH QUARTER

BUS	235	Business Management	5	0	0	5
BUS	272	Principles of Supervision	3	0	0	3
BUS		Electives	6	0	0	6
			14	0	0	14

BUSINESS COMPUTER PROGRAMMING T-022

The primary objective of the Business Computer Programming curriculum is to prepare individuals for gainful employment as computer programmers. The objective is fulfilled through study and application in areas such as computer and systems theories and concepts, data processing techniques, business operations, logic, flow charting, programming procedures and languages and types, uses and operation of equipment.

Entry-level jobs as computer programmer and computer programmer trainee are available. With experience and additional education, the individual may enter jobs such as data processing manager, computer programmer manager, systems analyst and systems manager.

Job Opportunities:

Entry Level

Computer Programmer
Computer Programmer Trainee
Information Systems Programmer
Process Control Programmer
Detail Programmer

Advanced Level

Data Processing Manager/Supervisor
Computer Operations Manager/
Supervisor
Chief Business Programmer
Data Processing Programmer/Analyst

Total credit hours: 112

Curriculum by Quarters

Course Title			Hours per Week			
			C	L	P	QH
FIRST QUARTER						
BUS	100	Keyboarding	3	0	0	3
EDP	100	Introduction to Data Processing	3	2	0	4
EDP	107	Logic and Decision Making I	3	0	0	3
MAT	117	EDP Mathematics	5	0	0	5
			14	2	0	15
SECOND QUARTER						
BUS	120	Accounting I	4	0	3	5
EDP	105	Assembly Language Programming I	5	2	0	6
EDP	108	Logic and Decision Making II	3	0	0	3
ENG	100	Oral Communication	3	0	0	3
			15	2	3	17
THIRD QUARTER						
BUS	121	Accounting II	4	0	3	5
BUS	210	Business Statistics	5	0	0	5
EDP	110	COBOL Programming I	3	2	0	4
ENG	101	Introduction to Written Communication	3	0	0	3
			15	2	3	17

FOURTH QUARTER

EDP	111	COBOL Programming II	4	2	0	5
EDP	201	Computer Systems	3	2	0	4
EDP	270	RPG II Programming	3	2	0	4
ENG	102	Composition	3	0	0	3
			13	6	0	16

FIFTH QUARTER

EDP	112	COBOL Programming III	4	2	0	5
EDP	205	Systems Design and Analysis	3	2	0	4
EDP	230	Introduction to FORTRAN	3	2	0	4
ENG	206	Communications	3	0	0	3
			13	6	0	16

SIXTH QUARTER

BUS		Business Elective	3	0	0	3
EDP	106	Assembly Language Programming II	4	2	0	5
EDP	208	Advanced Programming	3	2	0	4
		Sociology/Psychology Elective	3	0	0	3
			13	4	0	15

SEVENTH QUARTER

EDP	220	Research Project	1	8	0	5
EDP	245	UNIX Operating system	3	2	0	4
EDP	260	EDP Microcomputing	3	2	0	4
ENG	205	Report Writing	3	0	0	3
			10	12	0	16

COMPUTER ENGINEERING TECHNOLOGY T-040

This program is intended to provide the skills required to install, service and maintain computers, microprocessor and computer controlled equipment and computer peripheral devices.

The curriculum provides training in both the hardware and software areas of the computer field.

A sequence of introductory hardware courses provides the student with a strong background in physics, technical mathematics, electricity, electronics and digital logic circuits and concepts. Advanced course work provides a detailed study of: the logic of the central processing unit, the operation of integrated circuits in the central processing units, the operation and use of integrated circuit memory devices and the interfacing of the central processing unit to memory devices. Additional studies cover interfacing the central processing unit to external devices using both serial and parallel data transfer, the operation of large scale integration programmable interface units and their interfacing with the central processing unit, and the operation of computer peripheral devices such as video displays, printers, floppy disk storage systems, magnetic tape units, keyboards and the techniques of converting signal between the analog and digital forms.

The programming course work provides a sequence of study stressing good program design techniques, structured programming and program documentation. Rather than being familiar with a large number of programming languages, the student is expected to learn well a highly structured language, such as Pascal, and the understanding of the operation of the central processing unit and the related computer units is stressed. Computer operating system concepts are discussed to provide an unified view of the hardware and software aspects of the computer system.

Job Opportunities:
Computer Service Technician
Electronic Computer Mechanic
Electronic Systems Mechanic

Total credit hours: 126

Curriculum by Quarters

Course Title			Hours per Week C	L	P	QH
FIRST QUARTER						
ELC	101	Fundamentals of Electronics I	5	2	6	8
ENG	100	Oral Communication	3	0	0	3
MAT	101	Technical Mathematics I	5	0	0	5
			13	2	6	16

SECOND QUARTER

CET	120	Introduction to Programming I	2	0	3	3
ELC	102	Fundamentals of Electricity II	5	2	6	8
ENG	101	Written Communications	3	0	0	3
MAT	102	Technical Mathematics II	5	0	0	5
			15	0	9	19

THIRD QUARTER

ELN	110	Transistor Applications	5	2	6	8
ENG	102	Composition	3	0	0	3
MAT	103	Technical Mathematics III	5	0	0	5
PHY	111	Physics - Mechanics	3	2	0	4
			16	4	6	20

FOURTH QUARTER

CET	160	Assembly Language Programming	2	0	3	3
ELN	210	Linear Integrated Circuits	5	2	6	8
ELN	219	Digital Fundamentals	5	0	6	7
			12	2	15	18

FIFTH QUARTER

CET	200	Microprocessors	4	0	6	6
ELN	235	Industrial Electronics I	5	0	6	7
ENG	103	Technical Report Writing	3	0	0	3
PSY	112	Personality Development	3	0	0	3
			15	0	12	19

SIXTH QUARTER

CET	215	Mini-Computer Maintenance I	4	0	6	6
CET	220	Microprocessor Interfacing	4	0	6	6
PHY	114	Physics - Light and Sound	3	2	0	4
			11	2	12	16

SEVENTH QUARTER

CET	225	Mini-Computer Maintenance II	4	0	6	6
CET	232	Computer Peripherals	4	0	6	6
CET	235	Diagnostics and Test Programming	2	0	3	3
ECO	102	Economics I	3	0	0	3
			13	0	15	18

EARLY CHILDHOOD SPECIALIST T-073

The Early Childhood Specialist curriculum prepares individuals to work with programs and/or centers concerned with the care and development of infants and young children. Through study and application in such areas as child growth and development, physical and nutritional needs of children, care and guidance of children and communication with children and their parents, individuals will be able to function effectively in various programs and/or centers dealing with preschool children.

Job opportunities are available in such areas as day care centers, nursery schools, kindergartens, child development centers, hospitals, rehabilitation clinics, evaluation clinics, camps and recreational centers.

Job Opportunities:

Entry Level	**Advanced Level**
Child Care Worker	Director, Day Care
Day Care Worker	Director, Preschool
Child Care Assistant	

Total credit hours: 112

Curriculum by Quarters

Course Title			**Hours per Week**			
			C	**L**	**P**	**QH**
FIRST QUARTER						
EDU	101	Child Growth and Development	6	0	0	6
ENG	100	Oral Communication	3	0	0	3
HEA	101	Personal Hygiene and Health	3	0	0	3
PSY	102	General Psychology	5	0	0	5
			17	0	0	17
SECOND QUARTER						
EDU	102	Programs for Young Children	4	2	0	5
EDU	107	Communication with Young Children	3	2	0	4
ENG	101	Introduction to Written Communication	3	0	0	3
MAT	118	General Mathematics	3	0	0	3
PSY	205	Child Psychology	3	0	0	3
			16	4	0	18
THIRD QUARTER						
EDU	103	Working with Young Children	4	0	10	5
ENG	102	Composition	3	0	0	3
NUT	102	Nutrition for Young Children	3	2	0	4
SCI	101	General Science	3	0	0	3
			13	2	10	15

FOURTH QUARTER

EDU	104	Art for Young Children	3	0	0	3
EDU	108	Social Studies in Early Childhood	3	0	0	3
EDU	110	Instructional Media and Resources	2	0	3	3
EDU	112	Language Arts in Early Childhood	3	0	0	3
EDU	113	Health and Safety for Young Children	3	2	0	4
ENG	207	Educational Report Writing	3	0	0	3
			17	2	3	19

FIFTH QUARTER

EDU	105	Music and Creative Movement for Young Children	3	0	0	3
EDU	106	Activities for Young Children: Science and Math	5	0	10	6
ENG	116	Children's Literature	3	0	0	3
SOC	103	Sociology	3	0	0	3
			14	0	10	15

SIXTH QUARTER

EDU	109	Physical Activities: Games for Young Children	2	2	0	3
EDU	202	Seminar Co-op in Early Childhood	5	0	10	6
EDU	203	The Exceptional Child	3	2	0	4
SOC	105	Families in the American Culture	3	0	0	3
			13	4	10	16

SEVENTH QUARTER

EDU	206	Special Problems (or EDU electives)	3	0	0	3
EDU	204	Parent Education	3	0	0	3
EDU	211	Practice Teaching	4	0	20	6
			10	0	20	12

Electives:

EDU	230	Issues in Early Childhood: Discipline	1	0	0	1
EDU	231	Issues in Early Childhood: Staff Management	1	0	0	1
EDU	232	Programming for Infants: A Guide to Very Early Childhood Education	1	0	0	1
EDU	233	Issues in Early Childhood: Infant Feeding	1	0	0	1

ELECTROMECHANICAL TECHNOLOGY T-039

Advances in both manufacturing and maintenance techniques over the past decade have made it necessary to bridge the gap between electronics and mechanics with a technician versed in both diciplines. This type technician eliminates many communication and specialty problems and provides a highly efficient individual who can approach electromechanical problems, analyze the situation, find a solution, and actually perform the service; thus requiring only one technician instead of two or more. This curriculum provides courses to give the student a background in electricity/electronics, mechanical operations and functions, and in electromechanical systems covering such devices as computers, servomechanisms and numerical control systems.

The electromechanical technician may fabricate, test, analyze and adjust precision electromechanical instruments such as temperature probes and aerodynamic probes; use hand tools and metal working machines; install electrical assemblies and hardware; and test assembled instruments according to analysis. The electromechanical technician has employment possibilities with industry and business in maintenance, production, research, development or sales as an engineering assistant, engineering aide or field engineer.

Job Opportunities:
Electromechanical Technician
Fabrication Technician
Electromechanical Inspector

Total Credit Hours: 128

Curriculum by Quarters

Course Title			Hours Per Week			
			C	L	P	QH
FIRST QUARTER						
ELC	101	Fundamentals of Electricity I	5	2	6	8
ENG	100	Oral Communications	3	0	0	3
MAT	101	Technical Mathematics	5	0	0	5
			13	2	6	16
SECOND QUARTER						
ELC	102	Fundamentals of Electricity II	5	2	6	8
ENG	101	Introduction to Written Communication	3	0	0	3
MAT	102	Technical Mathematics II	5	0	0	5
			13	2	6	16
THIRD QUARTER						
ELN	110	Transistor Applications	5	2	6	8
ENG	102	Composition	3	0	0	3
MAT	103	Technical Mathematics III	5	0	0	5
PHY	111	Physics - Mechanics	3	2	0	4
			16	4	6	20

FOURTH QUARTER

DFT	112	Drafting - Electromechanical	3	2	0	4
ELM	200	Mechanisms	3	0	3	4
ELN	210	Linear Integrated Circuits	5	2	6	8
PHY	112	Physics - Materials and Heat	3	2	0	4
			14	6	9	20

FIFTH QUARTER

ELM	210	Electromechanical Devices	5	0	6	7
ELM	215	Electrical Control Systems	5	0	6	7
ENG	103	Technical Report Writing	3	0	0	3
			13	0	12	17

SIXTH QUARTER

ELM	220	Automatic Control Systems I	4	0	3	5
ELN	219	Digital Fundamental	5	0	6	7
MEC	230	Hydraulics and Pneumatics	3	2	0	4
PSY	206	Applied Psychology	3	0	0	3
			15	2	9	19

SEVENTH QUARTER

ECO	102	Economics I	3	0	0	3
ELM	230	Automatic Control Systems II	5	0	3	6
ELM	240	Electromechanical Troubleshooting	3	0	3	4
ELN	225	Computers and Microprocessors	5	0	6	7
			16	0	12	20

ELECTRONICS ENGINEERING TECHNOLOGY T-045

The Electronics curriculum provides a basic background in electronic related theory, with practical applications of electronics for business and industry. Courses are designed to develop competent electronics technicians who may work as assistants to engineers or as liaisons between engineers and skilled craftspersons.

The electronics technician will start in one or more of the following areas: research, design, development, production, maintenance or sales. The graduate may begin as an electronics technician, an engineering aide, laboratory technician, supervisor or equipment specialist.

Job Opportunities:
Electronics Technician
Electrical Tester
Electronics Engineering Technician
Electronics Mechanic
Electronic Sales and Service Technician

Total Credit Hours: 118

Curriculum by Quarters

Course Title			Hours Per Week C	L	P	QH
FIRST QUARTER						
ELC	101	Fundamentals of Electricity I	5	2	6	8
ENG	100	Oral Communication	3	0	0	3
MAT	101	Technical Mathematics I	5	0	0	5
			13	2	6	16
SECOND QUARTER						
ELC	102	Fundamentals of Electricity II	5	2	6	8
ENG	101	Introduction to Written Communication	3	0	0	3
MAT	102	Technical Mathematics II	5	0	0	5
			13	2	6	16
THIRD QUARTER						
ELN	110	Transistor Applications	5	2	6	8
ENG	102	Composition	3	0	0	3
MAT	103	Technical Mathematics III	5	0	0	5
PHY	111	Physics - Mechanics	3	2	0	4
			16	4	6	20
FOURTH QUARTER						
ELN	210	Linear Integrated Circuits	5	2	6	8
MAT	201	Technical Mathematics IV	5	0	0	5
PHY	112	Physics - Materials and Heat	3	2	0	4
			13	4	6	17

FIFTH QUARTER

ELN	219	Digital Fundamentals	5	0	6	7
ELN	235	Industrial Electronics I	5	0	6	7
ENG	103	Technical Report Writing	3	0	0	3
			13	0	12	17

SIXTH QUARTER

ELN	236	Industrial Electronics II	3	0	6	5
ELN	247	Electronic Systems: Computers	4	0	6	6
PSY	206	Applied Psychology	3	0	0	3
			10	0	12	14

SEVENTH QUARTER

ECO	102	Economics I	3	0	0	3
ELN	245	Electronic Design Project	2	0	6	4
ELN	248	Microprocessor Interfacing	5	0	6	7
PHY	114	Physics - Light and Sound	3	2	0	4
			13	2	12	18

HORTICULTURE TECHNOLOGY T-009

The Horticulture Technology curriculum encompasses the study and practical application of a variety of subjects in the field of horticulture. The curriculum consists of identifying and selecting plant materials, propagating, planting, and growing plants, designing basic landscapes and planting materials at the appropriate places and in the correct manner, properly maintaining plant materials, and managing the nursery greenhouse, and garden center. In addition, skills are developed in designing and building planters, walks, patios, fences and other landscape features. The curriculum is designed to provide students with the knowledge, skills and attitudes that are necessary for independent, creative thinking essential to success in this field.

Various types of employers hire the gaduates of this curriculum. Examples are nurseries, greenhouse operations, garden centers, landscape contractors, landscape maintenance companies, and municipal governmental agencies.

Job Opportunities:

Entry Level

Landscape Worker
Nursery Worker
Plant Propagator
Tree Pruner
Groundskeeper
Greenhouse Worker
Salesperson, Horticultural
 and Nursery Products
Landscape Construction Worker
Garden Center Worker
Lawn-Service Worker

Advanced Level

Horticulture - Specialty
 Grower, Field
Horticulture - Specialty
 Grower, Inside
Landscape Gardener
Nursery Management
Greenhouse Superintendent
Landscape Drafter

Total Credit Hours: 114

Curriculum by Quarters

Course Title			Hours Per Week			
			C	L	P	QH
FIRST QUARTER						
AGR	150	House Plants	3	0	0	3
AGR	170	Plant Science	4	2	0	5
AGR	185	Soil Science Fertilizer	5	2	0	6
ENG	100	Oral Communication	3	0	0	3
			15	4	0	17
SECOND QUARTER						
AGR	153	Greenhouse Management	3	2	0	4
AGR	254	Plant Propagation	3	2	0	4
EDP	103	Introduction to Microcomputing DOS	3	0	0	3
ENG	101	Introduction to Written Communication	3	0	0	3
			12	4	0	14

THIRD QUARTER

AGR	140	Home Maintenance	2	4	0	4
AGR	151	Plant Materials I	3	4	0	5
AGR	180	Bedding Plant Production	2	2	0	3
AGR	201	Agricultural Chemicals	3	0	0	3
ENG	102	Composition	3	0	0	3
			13	10	0	18

FOURTH QUARTER

AGR	145	Entomology and Pathology	4	2	0	5
AGR	152	Plant Materials II	3	4	0	5
AGR	240	Landscape Construction I	4	2	0	5
AGR	256	Nursery Management I	2	4	0	4
			13	12	0	19

FIFTH QUARTER

AGR	241	Landscape Construction II	4	2	0	5
AGR	251	Landscape Gardening I	3	4	0	5
AGR	258	Turf Practices	3	2	0	4
ENG	103	Technical Report Writing	3	0	0	3
			13	8	0	17

SIXTH QUARTER

AGR	252	Landscape Gardening II	3	4	0	5
AGR	257	Nursery Management II	2	4	0	4
BUS	109	Business Mathematics	5	0	0	5
BUS	190	Horticultural Business Management	3	0	0	3
			13	8	0	17

SEVENTH QUARTER

AGR	200	Practicum	0	0	30	3
AGR	210	Field Analysis	5	0	0	5
AGR	220	Vegetable and Flower Gardening	4	0	0	4
			9	0	30	12

LAW ENFORCEMENT TECHNOLOGY T-064

The Law Enforcement Technology curriculum prepares individuals for a career in the law enforcement services occupations field and other allied occupations. Law Enforcement occupations require a thorough understanding of criminal behavior, criminal investigation, interpersonal communications, law, patrol operations, psychology, sociology, traffic management and other aspects of law enforcement administration and operations.

Job opportunities are available with federal, state, county and municipal governments. In addition, knowledge, skills and abilities acquired in this course of study qualifies one for job opportunities with private enterprise in such areas as industrial, retail and private security.

Job Opportunities:
Alcohol Enforcement Officer
College or University Officer
Correctional Officer
Correctional Programs Assistant
Deputy Sheriff
Industrial Security Officer
Investigators
Highway Patrolman
Police Officer
Park Security Officer
Private Security Officer
Retail Security Officer
Wildlife Enforcement Officer

Total Credit Hours: 115

Curriculum by Quarters

Course Title			Hours Per Week C	L	P	QH
FIRST QUARTER						
CJC	101	Introduction to Criminal Justice	5	0	0	5
CJC	102	Criminology	5	0	0	5
ENG	100	Oral Communication	3	0	0	3
SOC	103	Sociology	3	0	0	3
			16	0	0	16
SECOND QUARTER						
CJC	103	Government - National	5	0	0	5
CJC	220	Criminal Justice Organization and Administration	5	0	0	5
ENG	101	Introduction to Written Communication	3	0	0	3
SOC	209	Social Problems	3	0	0	3
			16	0	0	16

THIRD QUARTER

BIO	101	General Biology I	3	2	0	4
CJC	104	Government - State and Local	5	0	0	5
CJC	120	Administration of Justice	4	0	0	4
CJC	213	Criminal Evidence	3	0	0	3
ENG	102	Composition	3	0	0	3
			18	2	0	19

FOURTH QUARTER

BIO	102	General Biology II	3	2	0	4
CJC	110	Crime and Delinquency	5	0	0	5
CJC	121	Criminal Justice Seminar and Practicum	5	0	10	6
			13	2	10	15

FIFTH QUARTER

CJC	115	Criminal Law I	5	0	0	5
CJC	117	Constitutional Law	3	0	0	3
CJC	260	Ethics in Criminal Justice	3	0	0	3
MAT	115	Fundamental Concepts of Algebra	3	0	0	3
PSY	101	Psychology	3	0	0	3
			17	0	0	17

SIXTH QUARTER

CJC	116	Criminal Law II	5	0	0	5
CJC	210	Criminalistics I	3	2	0	4
ENG	103	Technical Report Writing	3	0	0	3
SOC	210	Minorities In American Society	3	0	0	3
			14	2	0	15

SEVENTH QUARTER

CJC	211	Criminalistics II	3	2	0	4
ENG	115	Appreciation of Literature	3	0	0	3
MAT	116	Fundamental Concepts of Statistics	5	0	0	5
PSY	108	Abnormal Psychology	5	0	0	5
			16	2	0	17

MANUFACTURING ENGINEERING TECHNOLOGY T-050

The primary objective of the Manufacturing Engineering Technology curriculum is the training of personnel to assist the engineer or small industry in planning, tooling, operating, servicing and supervising manufacturing operations. This curriculum provides a basic background of mechanical and related theory, with specific skills in the use of manufacturing and testing equipment. Students are given experiences in operating and servicing machines, accompanied by general education and management courses.

A graduate of this program may qualify for an entry position in one of several manufacturing functions: methods, analysis, production scheduling, quality control, materials testing, plant layout, time study, machine tooling, maintenance, and equipment and instrument work.

Job Opportunities:
Mechanical Engineering Technician
Mechanical Technician
Tool Planner
Industrial Engineering Technician
Quality Control Technician
Material Scheduler
Tool Designer Apprentice
Automated Equipment Engineering Technician
Numerical Control Tool Programmer

Total Credit Hours: 120

Curriculum by Quarters

Course Title			Hours Per Week			
			C	L	P	QH
FIRST QUARTER						
DFT	101	Technical Drafting I	2	0	6	4
ENG	100	Oral Communication	3	0	0	3
MAT	101	Technical Mathematics I	5	0	0	5
MEC	101	Machine Processes I	1	0	6	3
MEC	165	Introduction to Basic Programming for MET	1	0	3	2
			12	0	15	17
SECOND QUARTER						
DFT	102	Technical Drafting II	2	0	6	4
ENG	101	Introduction to Written Communication	3	0	0	3
MAT	102	Technical Mathematics II	5	0	0	5
MEC	102	Machine Processes II	1	0	6	3
PHY	111	Physics - Mechanics	3	2	0	4
			14	2	12	19

THIRD QUARTER

ENG	102	Composition	3	0	0	3
MAT	103	Technical Mathematics III	5	0	0	5
MEC	201	Manufacturing Processes I	1	0	6	3
PHY	112	Physics - Materials and Heat	3	2	0	4
			12	2	6	15

FOURTH QUARTER

CHM	101	Chemistry	4	2	0	5
MEC	104	Applied Mechanics	5	0	0	5
MEC	180	Programming for Manufacturing	3	0	3	4
MEC	235	Fluid Power	3	0	3	4
			15	2	6	18

FIFTH QUARTER

MEC	202	Manufacturing Processes II	2	0	6	4
MEC	205	Strength of Materials	3	2	0	4
MEC	210	Ferrous Metallurgy	3	0	3	4
PHY	113	Physics-Electricity	3	2	0	4
			11	4	9	16

SIXTH QUARTER

ISC	201	Industrial Organization and Management	3	0	0	3
ISC	202	Quality Control	3	2	0	4
ISC	203	Motion and Time Study	3	2	0	4
MEC	237	Control Systems	3	2	0	4
PSY	206	Applied Psychology	3	0	0	3
			15	6	0	18

SEVENTH QUARTER

ECO	102	Economics I	3	0	0	3
ENG	103	Technical Report Writing	3	0	0	3
ISC	209	Plant Layout	3	2	0	4
MEC	203	Welding Processes	2	0	3	3
MEC	240	Introduction to Robotics	3	2	0	4
			14	4	3	17

MARKETING AND RETAILING T-020

The Marketing and Retailing curriculum is designed to prepare the individual for entry into middle-management positions in various marketing and retailing businesses and industries. This purpose will be fulfilled through study and application in areas such as marketing and merchandising techniques, management, selling, advertising, retailing and credit and collection procedures.

Through knowledge and skills the individual will be able to perform marketing and distribution activities and through the development of personal competencies and qualities will be provided the opportunity to enter an array of marketing and distribution jobs.

Job Opportunities:

Entry Level	**Advanced Level**
Display Person	Advertising Manager
General Salesperson	Display Manager
Assistant Buyer	Store Manager I
Junior Executive	Buyer I
Trainee Manager	Department Manager
	Merchandise Manager

Total Credit Hours: 106 or 107

Curriculum by Quarters

Course Title			Hours Per Week			
			C	L	P	QH
FIRST QUARTER						
BUS	100	Keyboarding	3	0	0	3
BUS	109	Business Mathematics	5	0	0	5
BUS	115	Business Law I	3	0	0	3
ENG	100	Oral Communication	3	0	0	3
			14	0	0	14
SECOND QUARTER						
BUS	116	Business Law II	3	0	0	3
BUS	120	Accounting I	4	0	3	5
BUS	232	Sales Development	3	0	0	3
BUS	263	Retailing I	3	0	0	3
ENG	101	Introduction to Written Communication	3	0	0	3
			16	0	3	17
THIRD QUARTER						
BUS	264	Retailing II	3	0	0	3
BUS	272	Principles of Supervision	3	0	0	3
EDP	101	Principles of Business Data Processing	3	2	0	4
ENG	102	Composition	3	0	0	3
PSY	206	Applied Psychology	3	0	0	3
			15	2	0	16

FOURTH QUARTER

BUS	239	Marketing	5	0	0	5
EDP	103	Introduction to Microcomputing DOS	3	0	0	3
ENG	206	Business Communications	3	0	0	3
PSY	112	Personality Development	3	0	0	3
			14	0	0	14

FIFTH QUARTER

BUS	234	Sales Management	3	0	0	3
BUS	243	Advertising	4	0	0	4
ECO	102	Economics I	3	0	0	3
EDP	156	Microcomputer Graphics	3	0	0	3
ENG	205	Report Writing	3	0	0	3
			16	0	0	16

SIXTH QUARTER

AIB	209	Installment Credit	4	0	0	4
BUS	242	Display and Design	3	2	0	4
BUS	262	Fashion Merchandising	3	2	0	4
ECO	104	Economics II	3	0	0	3
			13	4	0	15

SEVENTH QUARTER

BUS	128	Personal Financial Management	5	0	0	5
BUS	246	Public Relations	3	0	0	3
BUS	249	Marketing/Retailing Seminar	5	0	20	7
		or		or		
BUS		Electives	6	0	0	6
			13	0	20	15
				or		
			14	0	0	14

MECHANICAL DRAFTING AND DESIGN TECHNOLOGY T-043

The Mechanical Drafting and Design Technology curriculum prepares mechanical draftsmen. Emphasis is placed upon ability to think and plan, as well as upon drafting procedures and techniques used by mechanical draftsmen.

Mechanical drafting and design technicians perform many aspects of drafting, such as developing the drawing of a section, subassembly or major component. Investigating design factors and availability of materials and equipment, production methods and facilities are frequent assignments. They assist in the design of units and control from specifications by utilizing drawings of existing units and reports on trial fields based on engineers' original design concepts or specific ideas. Also, they may be assigned as coordinators for the execution of related work or other design, production, tooling, material and planning groups. Technicians with experience in this classification may often supervise the preparation of working drawings. These technicians are employed in many types of manufacturing, fabrication, research development and service industries. Substantial numbers also are employed in communications; transportation; public utilities; consulting engineering firms; and federal, state and local governments.

Job Opportunities:
Mechanical Engineering Technician
Mechanical Technician
Tool Design Drafter
Mechanical Drafter
Electromechanisms Design Drafter
Detailer
Casting's Drafter
Patent Drafter
Detail Drafter
Mechanical Equipment Engineering Assistant
Mechanical Design Technician
Die Designer

Total Credit Hours: 121

Curriculum by Quarters

Course Title			Hours Per Week			
			C	L	P	QH
FIRST QUARTER						
DFT	101	Technical Drafting I	2	0	6	4
DFT	151	Computer Graphics	2	0	0	2
ENG	101	Introduction to Written Communication	3	0	0	3
MAT	101	Technical Mathematics I	5	0	0	5
MEC	101	Machine Processes I	1	0	6	3
			13	0	12	17

SECOND QUARTER

DFT	102	Technical Drafting II	2	0	6	4
ENG	102	Composition	3	0	0	3
MAT	102	Technical Mathematics II	5	0	0	5
MEC	102	Machine Processes II	1	0	6	3
PHY	111	Physics - Mechanics	3	2	0	4
			14	2	12	19

THIRD QUARTER

DFT	103	Technical Drafting III	2	0	6	4
ENG	103	Technical Report Writing	3	0	0	3
MAT	103	Technical Mathematics III	5	0	0	5
MEC	201	Manufacturing Processes I	1	0	6	3
PHY	112	Physics - Materials and Heat	3	2	0	4
			14	2	12	19

FOURTH QUARTER

DFT	205	Design Drafting I	2	0	6	4
DFT	260	Dimensioning and Tolerancing	1	0	3	2
MEC	104	Applied Mechanics	5	0	0	5
MEC	210	Ferrous Metallurgy	3	0	3	4
MEC	235	Fluid Power	3	0	3	4
			14	0	15	19

FIFTH QUARTER

DFT	204	Descriptive Geometry	2	0	3	3
DFT	206	Design Drafting II	2	0	6	4
MEC	205	Strength of Materials	3	2	0	4
PHY	113	Physics - Electricity	3	2	0	4
			10	4	9	15

SIXTH QUARTER

DFT	211	Mechanisms	3	0	3	4
DFT	223	Design Drafting III	2	0	6	4
ENG	100	Oral Communication	3	0	0	3
ISC	201	Industrial Organization and Management	3	0	0	3
MEC	237	Control Systems	3	2	0	4
			14	2	9	18

SEVENTH QUARTER

DFT	212	Jig and Fixture Design	2	0	6	4
DFT	224	Product Design	1	0	3	2
DFT	225	Computer Graphics Design	1	0	3	2
ECO	102	Economics I	3	0	0	3
PSY	206	Applied Psychology	3	0	0	3
			10	0	12	14

NUCLEAR MEDICINE TECHNOLOGY T-104

Nuclear Medicine is a health technology which utilizes the internal administration of radioactive materials. The field is primarily diagnostic although some therapeutic procedures are performed. The Nuclear Medicine Technologist works under the direction of a physician who is licensed for the use of radioactive materials.

The Nuclear Medicine Technology curriculum prepares students to perform as clinical Nuclear Medicine Technologists. The emphasis of the program is on the development of the skills needed by the clinical technoligist. These skills include: patient care, utilization of radioactive materials, operation of specialized imaging and counting instrumentation, and performance of laboratory procedures. In addition to the development of these skills, the students receive instruction relating to the theories and principles from which the clinical procedures are developed.

Graduates of the program are eligible to take either of the two national certification/registration examinations currently offered. These examinations are given by the Nuclear Medicine Technology Certification Board (NMTCB) and the American Registry of Radiologic Technologist. (ARRT).

Individuals who wish to enter a program of Nuclear Medicine Technology should, if possible, complete high school courses in algebra, biology, chemistry, and physics prior to entry.

Job Opportunities:
Nuclear Medicine Technologist

Total Credit Hours: 136

Curriculum by Quarters

Course Title			Hours Per Week			
			C	L	P	QH
FIRST QUARTER						
BIO	107	Anatomy and Physiology I	3	2	0	4
BIO	115	Medical Terminology I	1	0	0	1
ENG	100	Oral Communications	3	0	0	3
MAT	113	Allied Health Mathematics I	3	0	0	3
NMT	105	Nuclear Medicine Technology I	2	0	0	2
NMT	115	Orientation to Clinical Nuclear Medicine	0	2	3	2
PSY	101	Psychology	3	0	0	3
			15	4	3	18
SECOND QUARTER						
BIO	108	Anatomy and Physiology II	3	2	0	4
BIO	116	Medical Terminology II	1	0	0	1
ENG	101	Introduction to Written Communication	3	0	0	3
MAT	114	Allied Health Mathematics II	3	0	0	3
NMT	106	Nuclear Medicine Technology II	2	0	0	2
NMT	119	Introduction to Clinical Practice I	0	2	6	3
PHY	100	Introduction to Physics	3	0	0	3
			15	4	6	19

THIRD QUARTER

CHM 103	Chemistry - General and Inorganic	3	2	0	4
ENG 102	Composition	3	0	0	3
NMT 107	Nuclear Medicine Technology III	2	2	0	3
NMT 116	Nuclear Physics	2	0	0	2
NMT 124	Introduction to Clinical Practice II	0	0	12	4
PHY 102	Electricity and Electronics	3	0	0	3
PSY 111	Abnormal Behavior	3	0	0	3
		16	4	12	22

FOURTH QUARTER

MAT 116	Statistics	5	0	0	5
NMT 108	Nuclear Medicine Technology IV	3	0	0	3
NMT 117	Health Physics	1	0	0	1
NMT 201	(202, 203, or 204) Clinical Practice	0	0	21	7
NMT 213	Principles of Nuclear Pharmacy	3	0	0	3
		12	0	21	19

FIFTH QUARTER

NMT 111	Principles of Nuclear Medicine I	2	0	0	2
NMT 202	(201, 203, or 204) Clinical Practice	0	0	21	7
NMT 220	Instrumentation I	2	0	0	2
NMT 225	Computers in Nuclear Medicine	3	0	0	3
NMT 289	Radiobiology	2	0	0	2
		9	0	21	16

SIXTH QUARTER

NMT 203	(201, 202, or 204) Clinical Practice	0	0	21	7
NMT 221	Principles of Nuclear Medicine II	2	0	0	2
NMT 235	Instrumentation II	2	2	0	3
NMT 251	Principles of In Vitro Nuclear Medicine I	2	2	0	3
		6	4	21	15

SEVENTH QUARTER

NMT 204	(201, 202, or 203) Clinical Practice	0	0	21	7
NMT 231	Principles of Nuclear Medicine III	2	0	0	2
NMT 245	Instrumentation III	2	2	0	3
		4	2	21	12

EIGHTH QUARTER

NMT 258	Principles of In Vitro Nuclear Medicine II	2	2	0	3
NMT 290	Nuclear Medicine Technology Seminar	2	0	0	2
NMT 292	Nuclear Medicine Technology Review	2	0	0	2
NMT 300	Clinical Practice Review	0	0	15	5
SOC 103	Sociology	3	0	0	3
		9	2	15	15

RADIOLOGIC TECHNOLOGY T-061

The Radiologic Technology curriculum prepares graduates to be competent Medical Radiographers. The radiographer is a skilled person qualified by technological education to provide patient services using imaging modalities (as directed by physicians qualified to order and/or perform radiologic procedures) by: (1) applying knowledge of the principles of radiation protection for the patient, self and others; (2) applying knowledge of anatomy, positioning and radiographic techniques to accurately demonstrate anatomical structures on a radiograph; (3) determining exposure factors to achieve optimum radiographic technique with a minimum of radiation exposure to the patient; (4) examining radiographs for the purpose of evaluating technique, positioning and other pertinent technical qualities; (5) exercising discretion and judgment in the performance of medical imaging procedures; (6) providing patient care essential to radiologic procedures; and (7) recognizing emergency patient conditions and initiating life saving first aid.

Graduates may be employed in radiology departments in hospitals, clinics, physicians' offices, research and medical laboratories, federal and state agencies and industry.

Graduates are eligible to take the national examination given by the American Registry of Radiologic Technologists for certification and registration as medical radiographers.

Individuals desiring a career in radiologic technology should take courses in biology, algebra, and chemistry and/or physics prior to entering the program.

Job Opportunities:
Radiologic Technologist
Radiographer

Total Credit Hours: 147

Curriculum by Quarters

Course Title			Hours Per Week			
			C	L	P	QH
FIRST QUARTER						
BIO	107	Anatomy and Physiology I	3	2	0	4
BIO	115	Medical Terminology I	1	0	0	1
EDP	103	Introduction to Microcomputing	3	0	0	3
MAT	113	Allied Health Mathematics I	3	0	0	3
PSY	101	Psychology	3	0	0	3
RDT	112	Introduction to Patient Care Techniques	2	0	0	2
RDT	113	Departmental Orientation and Medical Ethics and Law	2	2	0	3
			17	4	0	19
SECOND QUARTER						
BIO	108	Anatomy and Physiology II	3	2	0	4
BIO	116	Medical Terminology II	1	0	0	1
ENG	100	Oral Communication	3	0	0	3
MAT	114	Allied Health Mathematics II	3	0	0	3
PHY	101	Concepts in Physics	3	0	0	3
RDT	114	Basic Essentials of Radiologic Technology	3	2	9	7
			16	4	9	21

THIRD QUARTER

ENG	101	Written Communication	3	0	0	3
PSY	111	Abnormal Psychology	3	0	0	3
RDT	115	Radiation Physics and Radiobiology	3	0	0	3
RDT	137	Radiographic Technique I	3	0	0	3
RDT	138	Practicum I	0	2	15	6
RDT	139	Positioning and Related Anatomy I	3	0	0	3
			15	2	15	21

FOURTH QUARTER

ENG	102	Composition	3	0	0	3
RDT	125	Radiographic Darkroom	2	0	0	2
RDT	148	Practicum II	0	2	24	9
RDT	149	Positioning and Related Anatomy II	3	0	0	3
			8	2	24	17

FIFTH QUARTER

RDT	237	Radiographic Technique II	3	0	0	3
RDT	248	Practicum III	0	2	21	8
RDT	249	Radiation Protection	1	0	0	1
RDT	261	Pediatric, Emergency, and Operative Radiography	2	0	0	2
RDT	269	Positioning and Related Anatomy III	3	0	0	3
RDT	289	Film Critique I	2	0	0	2
			11	2	21	19

SIXTH QUARTER

RDT	258	Practicum IV	0	2	24	9
RDT	279	Positioning and Related Anatomy IV	3	0	0	3
RDT	283	Radiographic Pathology	2	0	0	2
RDT	290	Film Critique II	2	0	0	2
			7	2	24	16

SEVENTH QUARTER

RDT	233	Seminar	2	0	0	2
RDT	250	Special Procedures I	2	0	0	2
RDT	268	Practicum V	0	2	24	9
RDT	291	Film Critique III	2	0	0	2
SOC	103	Sociology	3	0	0	3
			9	2	24	18

EIGHTH QUARTER

RDT	252	Special Procedures II	2	0	0	2
RDT	254	Departmental Administration and Quality Assurance	3	0	0	3
RDT	278	Practicum VI	0	2	24	9
RDT	292	Film Critique IV	2	0	0	2
			7	2	24	16

REAL ESTATE T-127

The purposes of the Real Estate curriculum are to: (1) prepare the individual to enter the real estate industry, (2) provide an educational program for persons directly involved in various phases of the real estate industry, and (3) provide an opportunity for individuals wanting to fulfill professional or general interest needs.

These purposes will be fulfilled through a thorough introduction to real estate principles, practices, industry ethics, finance, law, appraisal techniques and trends.

The curriculum will provide the opportunity for an individual to enter public or private employment in real estate areas such as sales, finance, development, market analysis, valuation and property management. Advanced real estate job opportunities are available in areas such as brokerage, management, appraising or consulting.

Job Opportunities:

Entry Level
Real Estate Salesperson
Real Estate Broker
Sales Representative Trainee
Credit Investigator Trainee
Assistant Office Manager Trainee
Office Manager
Mortgage (lender) Loan Officer
Credit and Collection Manager

Advanced Level
Credit Analyst
Land Developer
Property Manager
Real Estate Appraiser
Real Estate Counselor

Total Credit Hours: 113

Curriculum by Quarters

Course Title			Hours Per Week			
			C	L	P	QH
FIRST QUARTER						
BUS	109	Business Mathematics	5	0	0	5
BUS	162	Fundamentals of Real Estate	5	0	0	5
BUS	164	Real Estate Law	5	0	0	5
ENG	101	Introduction to Written Communication	3	0	0	3
			18	0	0	18
SECOND QUARTER						
BUS	120	Accounting I	4	0	3	5
BUS	165	Real Estate Brokerage Operations	3	0	0	3
BUS	209	Real Estate Finance	5	0	0	5
ENG	102	Composition	3	0	0	3
			15	0	3	16

THIRD QUARTER

BUS	121	Accounting II	4	0	3	5
CIV	105	Architectural Materials and Methods	3	0	0	3
ECO	102	Economics I	3	0	0	3
ENG	100	Oral Communication	3	0	0	3
			13	0	3	14

FOURTH QUARTER

BUS	239	Marketing	5	0	0	5
BUS	292	Appraisal I	3	0	0	3
ECO	104	Economics II	3	0	0	3
ENG	205	Report Writing	3	0	0	3
BUS		Elective	3	0	0	3
			17	0	0	17

FIFTH QUARTER

BUS	216	Real Estate Sales	3	0	0	3
BUS	293	Appraisal II	3	2	0	4
PSY	206	Applied Psychology	3	0	0	3
BUS		Elective	3	0	0	3
		Elective	3	0	0	3
			15	2	0	16

SIXTH QUARTER

BUS	228	Real Estate Investment and Taxation	3	0	0	3
BUS	247	Business Insurance	3	0	0	3
BUS	294	Appraisal III	3	2	0	4
BUS	296	Property Management	3	0	0	3
ENG	206	Communications	3	0	0	3
			15	2	0	16

SEVENTH QUARTER

BUS	231	Real Estate Merchandising	3	0	3	3
BUS	235	Business Management	5	0	0	5
BUS	236	Land Development	3	2	0	4
BUS	238	Land Use Policy and Governmental Influences on Real Estate	3	2	0	4
			14	4	3	16

RESPIRATORY THERAPY TECHNOLOGY — THERAPIST T-091

The Respiratory Therapy Technology curricula offer career education options for respiratory therapists and/or respiratory therapy technicians.

The respiratory therapist specializes in the application of scientific knowledge and theory to practical, clinical problems of respiratory care. Knowledge and skills for performing these functions are usually achieved through two or more years of academic and clinical preparation. The respiratory therapist is qualified to assume primary clinical responsibility for all respiratory care modalities, including responsibilities involved in supervision of respiratory technician functions. The therapist is frequently required to exercise considerable independent, clinical judgment in the respiratory care of patients under the direct or indirect supervision of a physician. Further, the therapist is capable of serving as a technical resource person to the physician with regard to current practices in respiratory care, and to the hospital staff as to effective and safe methods for administering respiratory care.

The technician's role does not require the exercising of independent, clinical judgment; however, the technician is expected to adjust or modify therapeutic techniques within well-defined procedures based on a limited range of patient responses. Therefore, the effective use of the technician, especially in the critical care setting, requires the supervision of a respiratory therapist or a physician experienced in respiratory care. Knowledge and skills for performing these functions are usually achieved through one or more years of academic and clinical preparation.

Graduates of the technician and therapist curricula are eligible to apply for admission to the Entry Level Respiratory Therapy Practitioner (CRTT) examination by the National Board for Respiratory Care. Graduates of the therapist level curriculum are eligible to apply for admission to the Advanced Respiratory Care Practitioner (RRT) examination.

Individuals desiring a career in respiratory therapy technology should take biology, algebra and chemistry courses prior to entering the program.

Job Opportunities:
Respiratory Therapy Technician
Respiratory Therapist

Total Credit Hours: 127

Curriculum by Quarters

Course Title			Hours Per Week			
			C	L	P	QH
FIRST QUARTER						
BIO	107	Anatomy and Physiology I	3	2	0	4
CHM	103	Chemistry - General and Inorganic	3	2	0	4
MAT	113	Allied Health Mathematics I	3	0	0	3
PHY	101	Concepts in Physics	3	0	0	3
RTH	110	Orientation: Respiratory Therapy	0	0	6	2
RTH	150	Pharmacology	1	2	0	2
			13	6	6	18

SECOND QUARTER

BIO	108	Anatomy and Physiology II	3	2	0	4
ENG	100	Oral Communication	3	0	0	3
RTH	105	Theories and Principles I	4	2	0	5
RTH	111	Clinical Experience I	0	0	15	5
RTH	139	Cardiopulmonary Anatomy & Physiology	3	0	0	3
RTH	140	Chest Physiotherapy	1	0	0	1
			14	4	15	21

THIRD QUARTER

BIO	111	Microbiology	3	2	0	4
ENG	101	Introduction to Written Communication	3	0	0	3
RTH	106	Theories and Principles II	1	2	0	2
RTH	112	Clinical Experience II	0	0	18	6
RTH	205	Pulmonary Disease	4	0	0	4
			11	4	18	19

FOURTH QUARTER

CHM	104	Organic & Biochemistry	3	2	0	4
MAT	114	Allied Health Mathematics II	3	0	0	3
RTH	123	Clinical Experience III	0	0	18	6
RTH	240	Cardiopulmonary Rehabilitation	1	0	0	1
RTH	269	Cardiopulmonary Pathophysiology	4	0	0	4
			11	2	18	18

FIFTH QUARTER

ENG	102	Composition	3	0	0	3
RTH	215	Ventilators	2	2	0	3
RTH	218	Clinical Experience IV	0	0	18	6
RTH	250	Intensive Respiratory Care	3	0	0	3
SOC	103	Sociology	3	0	0	3
			11	2	18	18

SIXTH QUARTER

EDP	103	Introduction to Microcomputing DOS	3	0	0	3
ENG	103	Technical Report Writing	3	0	0	3
PSY	101	Psychology	3	0	0	3
RTH	211	Pediatrics	2	0	0	2
RTH	228	Clinical Experience V	0	0	18	6
RTH	268	Pulmonary Functions	3	0	0	3
			14	0	18	20

SEVENTH QUARTER

RTH	238	Clinical Experience VI	0	0	27	9
RTH	241	Respiratory Therapy Department Operations	1	0	0	1
RTH	257	Respiratory & Hemodynamic Monitoring Techniques	2	2	0	3
			3	2	27	13

SECRETARIAL-EXECUTIVE T-030

The purposes of the Secretarial-Executive curriculum are to: (1) prepare the individual to enter the secretarial profession, (2) provide an educational program for individuals wanting education for upgrading (moving from one secretarial position to another) or retraining (moving from present position to secretarial position), and (3) provide an opportunity for individuals wanting to fulfill professional or general interest needs.

These purposes will be fulfilled through skill development in the areas of typewriting, shorthand, transcription and business machines. Through these skills the individual will be able to perform office-related activities and through the development of personal competencies and qualities will be provided the opportunity to enter the secretarial profession.

Job Opportunities:

Entry Level	**Advanced Level**
Secretary	Administrative Secretary
Stenographer	Transcribing Operator Supervisor
Data Typist	Word Processing Supervisor
Typist	
Office Clerk	
Word Processing Correspondence Specialist	
Word Processing Typist	
Word Processing Administrative Secretary	
Receptionist	

Total Credit Hours: 111

Curriculum by Quarters

Course Title			Hours Per Week C	L	P	QH
FIRST QUARTER						
BUS	102	Typewriting I	2	0	3	3
BUS	109	Business Mathematics	5	0	0	5
BUS	128	Personal Financial Management	5	0	0	5
EDP	103	Introduction to Microcomputing DOS	3	0	0	3
ENG	100	Oral Communication	3	0	0	3
			18	0	3	19
SECOND QUARTER						
BUS	103	Typewriting II	2	0	3	3
BUS	106	Shorthand I	3	2	0	4
BUS	240	Introductory Word Processing on Microcomputers	2	0	3	3
ENG	101	Introduction to Written Communication	3	0	0	3
			10	2	6	13

THIRD QUARTER

BUS	104	Typewriting III	2	0	3	3
BUS	107	Shorthand II	3	2	0	4
BUS	115	Business Law I	3	0	0	3
ENG	102	Composition	3	0	0	3
PSY	112	Personality Development	3	0	0	3
			14	2	3	16

FOURTH QUARTER

BUS	105	Typewriting IV	2	0	3	3
BUS	108	Shorthand III	3	2	0	4
BUS	211	Reprographics	2	0	3	3
ENG	205	Report Writing	3	0	0	3
			10	2	6	13

FIFTH QUARTER

BUS	118	Secretarial Accounting I	4	0	3	5
BUS	206	Dictation/Transcription	3	2	0	4
EDP	101	Principles of Business Data Processing	3	2	0	4
ENG	206	Communications	3	0	0	3
BUS		Elective	3	0	0	3
			16	4	3	19

SIXTH QUARTER

BUS	113	Vocabulary/Terminology I	3	0	0	3
BUS	119	Secretarial Accounting II	4	0	3	5
BUS	214	Secretarial Procedures	5	0	0	5
BUS	250	Word Processing I	1	4	0	3
			13	4	3	16

SEVENTH QUARTER

BUS	219	Office Application (or BUS Elective)	1	0	20	3
BUS	251	Word Processing II	1	4	0	3
BUS	272	Principles of Supervision	3	0	0	3
SOC	103	Sociology	3	0	0	3
BUS		Elective	3	0	0	3
			11	4	20	15

SECRETARIAL-GENERAL OFFICE T-033

The purposes of the general office curriculum are to: (1) prepare the individual to enter clerical-office occupations, (2) provide an educational program for individuals wanting education for upgrading (moving from one position to another) or retraining (moving from present position to a clerical position), and (3) provide an opportunity for individuals wanting to fulfill professional or general interest needs.

These purposes will be fulfilled through skill development in the areas of typewriting, filing, and business machines. Through these skills and through development of personal competencies and qualities, the individual will be able to function effectively in office-related activities.

Job Opportunities:

Entry Level
Secretary
Transcriptionst
Data Typist
Typist
Office Clerk
Word Processing Correspondence Specialist
Word Processing Typist
Word Processing Administrative Secretary
Receptionist

Advanced Level
Administrative Secretary
Transcribing Operator Supervisor
Word Processing Supervisor

Total Credit Hours: 107

Curriculum by Quarters

Course Title			Hours Per Week C	L	P	QH
FIRST QUARTER						
BUS	102	Typewriting I	2	0	3	3
BUS	109	Business Mathematics	5	0	0	5
BUS	128	Personal Financial Management	5	0	0	5
EDP	103	Introduction to Microcomputing DOS	3	0	0	3
ENG	100	Oral Communication	3	0	0	3
			18	0	3	19
SECOND QUARTER						
BUS	103	Typewriting II	2	0	3	3
BUS	113	Vocabulary/Terminology I	3	0	0	3
BUS	240	Introductory Word Processing on Microcomputers	2	0	3	3
ENG	101	Introduction to Written Communication	3	0	0	3
			10	0	6	12

THIRD QUARTER

BUS	104	Typewriting III	2	0	3	3
BUS	114	Vocabulary/Terminology II	3	0	0	3
BUS	115	Business Law I	3	0	0	3
ENG	102	Composition	3	0	0	3
PSY	112	Personality Development	3	0	0	3
			14	0	3	15

FOURTH QUARTER

BUS	105	Typewriting IV	2	0	3	3
BUS	211	Reprographics	2	0	3	3
ENG	205	Report Writing	3	0	0	3
PSY	206	Applied Psychology	3	0	0	3
			10	0	6	12

FIFTH QUARTER

BUS	112	Machine Transcription I	2	0	3	3
BUS	118	Secretarial Accounting I	4	0	3	5
EDP	101	Principles of Business Data Processing	3	2	0	4
ENG	206	Communications	3	0	0	3
BUS		Elective	3	0	0	3
			15	2	6	18

SIXTH QUARTER

BUS	119	Secretarial Accounting II	4	0	3	5
BUS	212	Machine Transcription II	2	0	3	3
BUS	214	Secretarial Procedures	5	0	0	5
BUS	250	Word Processing I	1	4	0	3
			12	4	6	16

SEVENTH QUARTER

BUS	215	Machine Transcription III	2	0	3	3
BUS	219	Office Application (or BUS Elective)	1	0	20	3
BUS	251	Word Processing II	1	4	0	3
BUS	272	Principles of Supervision	3	0	0	3
SOC	103	Sociology	3	0	0	3
			10	4	23	15

ELECTIVES

In order to broaden the educational experience, most of the Associate in Applied Science degree programs provide for elective subjects as part of the degree requirements.

Electives are to be selected by the student and his advisor. These elective courses should be consistent with the student's educational needs, interests, and goals. General electives may be chosen from any technical program courses for which the student meets prerequisites. Specified electives should be chosen from courses available within the curriculum department or division.

In the Business Department, for example, business electives may be selected from courses with BUS, ECO, EDP, AIB, and ISC course numbers. The course descriptions are listed in alphabetical order in the back of this catalog. Listings or suggestions for appropriate courses are also available from the advisors or Admissions and Counseling offices in Student Services.

GENERAL EDUCATION G-020

The General Education curriculum is designed to provide an opportunity for students who seek personal growth, intellectual enrichment, and improvement in general knowledge to pursue a two year degree without concentrating their studies in a specific vocational or technical field. The program offers basic course work in English, social science, humanities, natural science, and mathematics. Beyond these basics each student may select additional courses that best serve his needs and interests for a minimum of 96 credit hours.

The program is principally deisgned for students wanting only two years of higher education; however, the required and elective courses in the program may be applied to a four-year degree at some area senior institutions. The transferability of this credit is determined by the accepting senior institution.

Total Credit Hours: 96

	Credit Hours Required
English	15
Social Science	15
Mathematics - Natural Science	15
Humanities	15
Electives	36

PRE-TECHNICAL PROGRAM

The Pre-Technical program provides a student an opportunity to build academic skills and acquire the background which should facilitate success in his/her desired curriculum program.

For an applicant to a degree program who, on the basis of test results and past performance, does not qualify for immediate admission to his/her chosen program of study, non-credit developmental course work is available and may be required as a prerequisite for registration in specific credit courses.

A student may then transfer all applicable credit courses into his/her curriculum program when the criteria have been met the pre-technical and selected curriculum courses have been completed. All credit courses within the student's chosen curriculum will then be applied toward graduation.

Some developmental courses are also open to students who wish to take them for personal benefit.

PRE-TECHNICAL PROGRAM T-099

This program offers a series of courses for preparation, remediation, and guidance for students who, for a variety of reasons, do not meet the specific entrance requirements for the regular curriculum programs of their choice. Students who do meet the minimum entrance requirements but whose previous academic records indicate that they may have difficulty in successfully completing their programs are also advised to enter the Pre-Technical program.

The student's academic program will be individually designed to meet his specific preparatory and remedial needs. The courses will be selected from the Pre-Technical offerings and from technical and/or vocational credit courses.

PRE-TECHNICAL COURSE OFFERINGS

Course Title			Hours per Week			
			C	L	P	QH*
ACA	100	Microcomputer as a Study Tool	1	0	0	1(1)
BIO	010	Human Anatomy	3	0	0	0(3)
BUS	010	Pre-Technical Accounting	5	0	0	0(5)
BUS	030	Introduction to Shorthand	5	0	0	0(5)
CHM	010	Pre-Technical Chemistry	3	2	0	0(4)
ENG	001	Spelling	3	0	0	0(3)
ENG	005	Language Development I	2	2	0	0(3)
ENG	006	Language Development II	2	2	0	0(3)
ENG	007	Language Development III	2	2	0	0(3)
ENG	008	Language Development IV	2	2	0	0(3)
ENG	010	Basic Writing Skills	5	0	0	0(5)
ENG	021	Basic Reading Skills and Vocabulary I	3	0	0	0(3)
ENG	022	Basic Reading Skills and Vocabulary II	3	0	0	0(3)
ENG	023	Basic Reading Skills III	3	0	0	0(3)
ENG	050	English for International Students	5	0	0	0(5)
MAT	001	Structure of Arithmetic	5	0	0	0(5)
MAT	002	Pre-Business Math	5	0	0	0(5)
MAT	003	Introductory Algebra	5	0	0	0(5)
MAT	004	Intermediate Algebra	5	0	0	0(5)
MAT	005	Geometry	5	0	0	0(5)
MAT	009	Algebra and Trigonometry	5	0	0	0(5)
MAT	020	Mathematics for Health Education	3	0	0	0(3)
NUT	001	Basic Nutrition	3	0	0	0(3)
PHY	001	Pre-Technical Physics	3	2	0	0(4)
SOC	010	Study Skills	3	0	0	0(3)
SOC	020	Academic Survival Skills	2	0	0	0(2)
SOC	100	Sociology I	0	4	0	2
SOC	101	Sociology II	0	4	0	2

*Equivalent credit hours shown in parenthesis.

VOCATIONAL DIPLOMA PROGRAM

The diploma curricula are practical in nature and are designed to prepare the student for immediate employment opportunities in a skilled trade. All curricula are designed for one year or four consecutive quarters of intensive study. (Evening curricula require approximately two years.) Upon completion, the graduate is awarded the State Vocational Diploma. The vocational courses, forming each diploma curriculum, are not designed for transfer to Associate (or higher) degree levels of instruction.

Sample Course Listing

			C	L	P (or CE)	QH
ENG	102	COMPOSITION	3	0	0	3
Course Prefix	Course Number	Course Title	Classroom Hours per week	Laboratory Hours per week	Practicum per week (Practical application or clinical experience per week.)	Quarter Hours Credit

Contact Hours per week

AIR CONDITIONING, REFRIGERATION, AND HEATING V-024

The Air Conditioning, Heating, and Refrigeration curriculum develops an understanding of the basic principles involved in the construction, installation, operation and maintenance of climate control equipment. Courses in blueprint reading, duct construction, welding, circuits and controls, math, science and general education are included to help provide supporting skills necessary for the mechanic to function successfully in the trade.

The air conditioning, heating, and refrigeration mechanic installs, maintains, services, and repairs environmental control systems in residences, department and food stores, office buildings, industries, restaurants, institutions, and commercial establishments. Job opportunities exist with companies that specialize in air conditioning, heating, and commercial refrigeration installation and service. The graduate should be able to assist in installing mechanical equipment, duct work, and electrical controls necessary in residential and commercial projects. With experience the graduate should be able to service various air conditioning, heating, and refrigeration components, troubleshoot systems; and provide the preventive maintenance required by mechanical equipment. This person may be employed in areas of maintenance, installation, sales, and service in the field of air conditioning, heating and cooling.

Job Opportunities:

Entry Level
Air Conditioning Mechanic
Heating and Air Conditioning Mechanic
Heating Mechanic
Refrigeration Mechanic
Heating and Air Conditioning Mechanic Helper
Refrigeration Mechanic Helper

Advanced Level
Environmental Control Systems Installer-Servicer
Hot Air Furnace Installer and Repairer
Domestic Air Conditioning Installer
Energy Management Systems Installer-Servicer, Sales

Total Credit Hours: 71

Curriculum by Quarters

Course Title			Hours Per Week			
			C	L	P	QH
FIRST QUARTER						
AHR	1102	Fundamentals of Refrigeration	6	0	9	9
MAT	1102	Algebra	5	0	0	5
PHY	1103	Fundamentals of Electricity	3	2	0	4
WLD	1111	Air Conditioning Welding	0	0	3	1
			14	2	12	19

SECOND QUARTER

AHR	1103	Domestic and Commercial Refrigeration	6	0	12	10
DFT	1107	Blueprint Reading	1	0	3	2
ELC	1111	Applied Electricity II	3	0	0	3
ENG	1101	Communications I	3	0	0	3
			13	0	15	18

THIRD QUARTER

AHR	1104	Air Conditioning Controls I	5	0	3	6
AHR	1105	Principles of Air Conditioning	6	0	9	9
ENG	1112	Communications II	3	0	0	3
			14	0	12	18

FOURTH QUARTER

AHR	1106	Air Conditioning Controls II	3	0	0	3
BUS	1103	Small Business Operations	3	0	0	3
HET	1101	Heating Systems	6	0	12	10
			12	0	12	16

AUTOMOTIVE BODY REPAIR V-001

The Automotive Body Repair curriculum provides training in the use of the equipment and materials of the auto body mechanic trade. The student studies the construction of the automobile body and techniques of auto body repairing, rebuilding and refinishing.

Repairing, straightening, aligning, metal finishing and painting of automobile bodies and frames are typical jobs performed. Job titles include automobile body repairperson, automotive painter, and frame and chassis repairperson. Persons completing this curriculum may find employment with franchised automobile body dealers, independent garages, or may start their own business.

Job Opportunities:

Automobile Accessories Installer
Automobile-Repair-Service Estimator
Appraiser, Automobile Damage
Automatic Window, Seat, and Top Lift Repairer
Painter Helper, Automotive
Painter, Transportation Equipment
Automobile Body Customizer
Automobile Body Repairer

Total Credit Hours: 67

Curriculum by Quarters

Course Title			Hours Per Week			
			C	L	P	QH
FIRST QUARTER						
AUT	1111	Automotive Body Repair I	3	0	12	7
ENG	1101	Communications I	3	0	0	3
MAT	1101	Fundamentals of Mathematics	5	0	0	5
WLD	1130	Applied Basic Arc and Gas Welding	2	0	6	4
			13	0	18	19
SECOND QUARTER						
AUT	1112	Automotive Body Repair II	3	0	15	8
ENG	1112	Communications II	3	0	0	3
PHY	1101	Applied Science I	3	2	0	4
WLD	1105	Introduction to Shielded Metal Arc Welding	1	0	6	3
			10	2	21	18

THIRD QUARTER

AUT	1113	Metal Finishing and Painting	2	0	12	6
AUT	1114	Frame Straightening and Alignment	2	0	6	4
PSY	1101	Human Relations	3	0	0	3
WLD	1131	Applied Inert Gas Welding	2	0	3	3
			9	0	21	16

FOURTH QUARTER

AUT	1116	Auto and Truck Painting	3	0	21	10
BUS	1103	Small Business Operations	3	0	0	3
DFT	1101	Schematics and Diagrams	0	0	3	1
			6	0	24	14

AUTOMOTIVE MECHANICS V-003

The Automotive Mechanics curriculum provides a training program for developing the basic knowledge and skills needed to inspect, diagnose, repair and adjust automotive vehicles. Manual skills are developed in practical shop work and the technical understanding of the operating principles involved in the modern automobile are taught through class assignments, discussions and shop practices.

Automobile mechanics maintain and repair mechanical, electrical and body parts of passenger cars, trucks and buses. In some communities and rural areas they also may service tractors or marine engines and other gasoline-powered equipment. Mechanics inspect and test to determine the causes of faulty operation. They repair or replace defective parts to restore the vehicle or machine to proper operating condition and use shop manuals and other technical publications as references for technical data. Persons completing this curriculum may find employment with franchised automobile dealers, independent garages, or may start their own business.

Job Opportunities:

Entry Level
General Mechanic
Tune-up Mechanic
Front-end Specialist
Automatic Transmission Specialist
Brake Specialist

Advanced Level
Shop Supervisor
Shop Foreman

Total Credit Hours: 71

Curriculum by Quarters

Course Title			Hours Per Week			
			C	L	P	QH
FIRST QUARTER						
BUS	1103	Small Business Operations	3	0	0	3
MAT	1101	Fundamentals of Mathematics	5	0	0	5
PME	1101	Internal Combustion Engines	4	0	15	9
PME	1103	Automobile Fuel Systems	2	0	3	3
			14	0	18	20
SECOND QUARTER						
AUT	1123	Automotive Chassis and Suspension Systems	4	0	15	9
ENG	1101	Communications I	3	0	0	3
PHY	1101	Applied Science I	3	2	0	4
WLD	1101	Basic Gas and Arc Welding	1	0	3	2
			11	2	18	18

THIRD QUARTER

AHR	1101	Automotive Air Conditioning	2	0	3	3
ENG	1112	Communications II	3	0	0	3
MEC	1112	Machine Shop Processes	1	0	3	2
PME	1102	Automotive Electrical Systems	5	0	15	10
			11	0	21	18

FOURTH QUARTER

AUT	1124	Automotive Power Trains	3	0	9	6
AUT	1125	Automotive Servicing	3	0	9	6
PSY	1101	Human Relations	3	0	0	3
			9	0	18	15

CARPENTRY AND CABINETMAKING V-007

Carpenters construct, erect, install and repair structures of wood, plywood and wallboard, using hand and power tools. This curriculum in carpentry is designed to prepare individuals with skills and knowledge of construction with wood. The curriculum includes mathematics, blueprint reading, methods of construction and information on building materials and energy efficient construction.

Carpenters work on new construction and maintain and repair many types of existing structures, both residential and commercial. They have an understanding of building materials, concrete form construction, rough framing, roof and stair construction, the application of interior and exterior trim, insulation, and other energy saving materials and the installation of cabinets and fixtures.

Most carpenters are employed by contractors in the building construction fields. When specializing in a particular phase of carpentry, the job may be designed according to the specialty as rough carpenter, framing carpenter, form carpenter, scaffolding carpenter, acoustical insulating carpenter and finish carpenter.

Job Opportunities:

Entry Level
Carpenter
Building Construction Inspector
Roofer
Cabinet Installer
Maintenance Carpenter

Advanced Level (with experience)
Carpenter Foreman
Finish Carpenter
Cabinetmaker

Total Credit Hours: 69

Curriculum by Quarters

Course Title			Hours Per Week C	L	P	QH
FIRST QUARTER						
CAR	1101	Carpentry I	5	0	15	10
DFT	1110	Blueprint Reading I	0	0	3	1
ENG	1101	Communications I	3	0	0	3
MAT	1113	Carpenter's Mathematics and Estimating	5	0	0	5
			13	0	18	19

SECOND QUARTER

CAR	1102	Carpentry II	5	0	15	10
DFT	1111	Blueprint Reading II	0	0	3	1
MAT	1114	Carpenter's Mathematics	5	0	0	5
PSY	1101	Human Relations	3	0	0	3
			13	0	18	19

THIRD QUARTER

BUS	1103	Small Business Operations	3	0	0	3
CAR	1103	Carpentry III	5	0	15	10
CAR	1114	Building Codes	3	0	0	3
			11	0	15	16

FOURTH QUARTER

CAR	1105	Carpentry IV	5	0	15	10
CAR	1115	Estimating for Residential Construction	2	0	0	2
ENG	1112	Communications II	3	0	0	3
			10	0	15	15

DIESEL VEHICLE MAINTENANCE V-013

The Diesel Vehicle Maintenance curriculum provides a program for developing the basic knowledge and skills needed in diesel vehicle maintenance. Manual skills are developed in practical shop work.

The use of diesel engines are found in farm and construction equipment, electric generators, trucks, buses, trains, automobiles and ships. Many diesel vehicle mechanics specialize in maintenance and repair of equipment, others specialize in rebuilding engines.

Diesel vehicle mechanics are instructed through class assignments, discussion and shop practice to maintain and repair engines, chassis and suspensions, and power trains used to power farm equipment, construction equipment, buses and trucks. They use handtools, precision measuring and testing instruments, and power tools in overhauling and maintaining diesel powered equipment.

Job Opportunities:

Diesel Mechanic
Diesel-Mechanic Apprentice
Diesel-Mechanic Helper
Fuel-Injection Servicer
Repairer, Heavy
Construction-Equipment-Mechanic Helper
Spring-Repairer Helper, Hand
Maintenance Mechanic Helper
Tractor-Mechanic Helper

Total Credit Hours: 69

Curriculum by Quarters

Course Title			Hours Per Week C	L	P	QH
FIRST QUARTER						
DSL	1101	Diesel Engines	4	0	15	9
ENG	1112	Communications II	3	0	0	3
PHY	1101	Applied Science I	3	2	0	4
WLD	1101	Basic Gas and Arc Welding	1	0	3	2
			11	2	18	18
SECOND QUARTER						
AHR	1101	Automotive Air Conditioning	2	0	3	3
DFT	1101	Schematics and Diagrams	0	0	3	1
DSL	1102	Diesel Electrical Systems	5	0	15	10
MAT	1101	Fundamentals of Mathematics	5	0	0	5
			12	0	21	19

THIRD QUARTER

DSL	1103	Diesel Fuel Injection	2	0	6	4
DSL	1104	Power Trains, Chassis, and Suspension Systems	4	0	15	9
ENG	1101	Communications I	3	0	0	3
			9	0	21	16

FOURTH QUARTER

BUS	1103	Small Business Operations	3	0	0	3
DSL	1105	Diesel Servicing	5	0	15	10
MEC	1120	Machine Processes	1	0	6	3
			9	0	21	16

ELECTRICAL INSTALLATION AND MAINTENANCE V-018

The Electrical Installation and Maintenance curriculum is designed to provide a training program in the basic knowledge, fundamentals and practices involved in the electrical trades. A large segment of the program is laboratory and shop instruction designed to give the student practical knowledge and application experience in the fundamentals taught in class.

The graduate of this curriculum is qualified to enter an electrical trade as an on-the-job trainee or apprentice, assisting in the layout, installation, check out and maintenance of systems in residential, commercial or industrial settings.

Job Opportunities:

Entry Level	**Advanced Level**
Electrical Apprentice	Electrician

Total Credit Hours: 77

Curriculum by Quarters

Course Title			Hours Per Week			
			C	L	P	QH
FIRST QUARTER						
ELC	1121	Electrical Installation Fundamentals	7	0	15	12
MAT	1101	Fundamentals of Mathematics	5	0	0	5
PHY	1103	Fundamentals of Electricity	3	2	0	4
			15	2	15	21
SECOND QUARTER						
DFT	1110	Blueprint Reading I	0	0	3	1
ELC	1122	Residential Wiring I	7	0	15	12
ENG	1101	Communications I	3	0	0	3
PHY	1102	Applied Science II	3	2	0	4
			13	2	18	20

THIRD QUARTER

DFT	1113	Blueprint Reading: Electrical	0	0	3	1
ELC	1123	Residential Wiring II	6	0	15	11
ENG	1112	Communications II	3	0	0	3
PSY	1101	Human Relations	3	0	0	3
			12	0	18	18

FOURTH QUARTER

BUS	1103	Small Business Operations	3	0	0	3
ELC	1125	Commercial and Industrial Wiring	6	0	15	11
ELN	1118	Industrial Electronics	3	0	3	4
			12	0	18	18

ELECTRONIC SERVICING V-042

The curriculum in Electronic Servicing is designed to provide basic knowledge and skills required in the installation, maintenance and servicing of electronic components and systems. Laboratory time will be spent verifying electronic theory and principles, learning installation, maintenance and service techniques.

An electronic service technician will be able to install, maintain, and service electronic equipment including: radios, television, audio/video recording and playback equipment, home entertainment systems, digital electronic systems, Master Antenna Television and Cable Television components and systems.

Job Opportunities:
Electronic Service Technician
Audio/Video Service Technician
Radio Service Technician
Television Service Technician

Total Credit Hours: 71

Curriculum by Quarters

Course Title			Hours Per Week			
			C	L	P	QH
FIRST QUARTER						
ELC	1120	Direct and Alternating Current	7	0	15	12
ENG	1101	Communications I	3	0	0	3
MAT	1115	Elements of Mathematics	5	0	0	5
			15	0	15	20
SECOND QUARTER						
ELN	1121	Solid State Devices and Circuits	5	0	9	8
ELN	1122	Transistor Theory and Circuits	4	0	9	7
MAT	1116	Elements of Mathematics II	3	0	0	3
			12	0	18	18

THIRD QUARTER

ELN	1123	Black and White Television Servicing	7	0	18	13
PHY	1104	Applied Science IV	3	2	0	4
			10	2	18	17

FOURTH QUARTER

ELN	1124	Color Television Servicing	6	0	21	13
HUM	1101	Humanities for Vocational Students	3	0	0	3
			9	0	21	16

GRAPHIC ARTS — PRINTING V-022

This curriculum gives individuals experience with equipment and a working knowledge of methods used in the graphic arts industry. Ample opportunities are provided for students to develop skills in the operation of machines and equipment and to become familiar with a wide range of graphic processes.

There are many distinct occupations in the graphic arts industry. Graduates will be able to set type by various methods, prepare copy and artwork, proofread, operate presses, understand the photomechanical process, operate bindery equipment and perform a variety of other graphic arts skills.

Job Opportunities:
Printer
Printer Helper
Press Operator
Press Operator Apprentice
Paste-up Artist
Camera Process Operator
Image Assembler
Type Setter

Total Credit Hours: 74

Curriculum by Quarters

Course Title			Hours Per Week			
			C	L	P	QH
FIRST QUARTER						
BUS	1122	Typing I	2	0	3	3
MAT	1150	Printer's Mathematics	5	0	0	5
PRN	1101	Printer's English	3	0	0	3
PRN	1131	Introduction to Printing	6	0	12	10
			16	0	15	21
SECOND QUARTER						
PHY	1114	Science for Printers	3	2	0	4
PRN	1132	Offset Printing I	4	0	12	8
PRN	1134	Composition	3	0	6	5
			10	2	18	17

THIRD QUARTER

ENG	1101	Communications I	3	0	0	3
PRN	1133	Offset Printing II	6	0	15	11
PRN	1135	Composition II	3	0	3	4
			12	0	18	18

FOURTH QUARTER

BUS	1103	Small Business Operations	3	0	0	3
ENG	1112	Communications II	3	0	0	3
PRN	1136	Estimating	5	0	0	5
PRN	1137	Printing Project	0	0	21	7
			11	0	21	18

MACHINIST V-032

The Machinist curriculum gives individuals the opportunity to acquire basic skills and related technical information necessary to gain employment as machinist. The machinist is a skilled metalworker who shapes metal by using machine tools and hand tools. Machinists must be able to set up and operate the machine tools found in a modern shop. The machinist is able to select the proper tools and materials required for each job and to plan the cutting and finishing operations in their proper order so that the work can be finished according to blueprint or written specifications. The machinist makes computations relating to dimensions of work, tooling, feeds and speeds of machining. Precision measuring instruments are used to measure the accuracy of work. The machinist also must know the characteristics of metals so that annealing and hardening of tools and metal parts can be accomplished in the process of turning a block of metal into an intricate precise part.

Job Opportunities:

Entry Level
Machinist Apprentice
Die Maker Apprentice
Toolmaker Apprentice
Tool and Die Maker Apprentice
Machine Set-up Operator
Quality Control Foreman
Turret Lathe Set-up Operator
Tool Machine Set-up Operator
Electrical Discharge Machine
  Set-up Operator

Advanced Level
Machinist
Maintenance Machinist

Total Credit Hours: 69

Curriculum by Quarters

Course Title			Hours Per Week			
			C	L	P	QH
FIRST QUARTER						
DFT	1104	Mechanical Drawing I	1	0	3	2
HUM	1101	Humanities for Vocational Students	3	0	0	3
MAT	1101	Fundamentals of Mathematics	5	0	0	5
MEC	1101	Machine Shop Theory and Practice I	4	0	12	8
			13	0	15	18
SECOND QUARTER						
DFT	1105	Mechanical Drawing II	1	0	3	2
MAT	1102	Algebra	5	0	0	5
MEC	1102	Machine Shop Theory and Practice II	4	0	12	8
MEC	1115	Metallurgy for Machinist	2	0	3	3
			12	0	18	18

THIRD QUARTER

DFT	1106	Mechanical Drawing III	1	0	3	2
ENG	1112	Communications II	3	0	0	3
MAT	1103	Geometry	3	0	0	3
MEC	1103	Machine Shop Theory and Practice III	3	0	12	7
MEC	1113	CNC Lathe Operation	1	0	3	2
			11	0	18	17

FOURTH QUARTER

MAT	1104	Trigonometry	3	0	0	3
MEC	1104	Machine Shop Theory and Practice IV	3	0	12	7
MEC	1114	CNC Milling Machine Operation	1	0	3	2
PHY	1101	Applied Science I	3	2	0	4
			10	2	15	16

PLUMBING AND PIPEFITTING V-037

The Plumbing and Pipefitting curriculum is designed to train individuals to repair or install plumbing systems in residences and small commercial buildings. Courses in plumbing practices and pipefitting are included to provide practical experience as well as courses in theory that one must know to advance and keep up to date with new innovations. Other courses in communication skills, physics, human relations and business operations are provided to assist the individual in occupational growth.

Plumbers are employed by contractors in the building construction fields to install pipe systems which carry water, steam, air or other liquids or gases for sanitation, heating, industrial production and various other uses. They also alter and repair existing pipe systems and install plumbing fixtures, appliances, and heating and refrigeration units.

Job Opportunities:

Entry Level	**Advanced Level**
Plumber (Apprentice)	Plumber
Pipefitter (Apprentice)	Pipefitter
	Foreman or Supervisor

Total Credit Hours: 67

Curriculum by Quarters

Course Title			**Hours Per Week**			
			C	**L**	**P**	**QH**
FIRST QUARTER						
DFT	1110	Blueprint Reading I	0	0	3	1
MAT	1117	Plumber's Arithmetic	4	0	0	4
PLU	1131	Plumbing I	8	0	15	13
			12	0	18	18
SECOND QUARTER						
ENG	1101	Communications I	3	0	0	3
PHY	1101	Applied Science I	3	2	0	4
PLU	1132	Plumbing II	3	0	15	8
WLD	1101	Basic Gas and Arc Welding	1	0	3	2
			10	2	18	17

THIRD QUARTER

DFT	1112	Drafting I: Plumbing	1	0	3	2
PLU	1133	Plumbing III	5	0	18	11
PSY	1101	Human Relations	3	0	0	3
			9	0	21	16

FOURTH QUARTER

BUS	1103	Small Business Operations	3	0	0	3
ENG	1112	Communications II	3	0	0	3
PLU	1134	Plumbing IV	3	0	21	10
			9	0	21	16

PRACTICAL NURSE EDUCATION V-038

The Practical Nurse Education curriculum graduates are prepared to take the National Council Licensure Examination required to practice as a licensed practical nurse. The Practical Nurse Education curriculum is designed to develop competencies in practicing the following five components of practice as defined by the North Carolina *Nursing Practice Act,* 1981: (1) participating in assessing the client's physical and mental health including the client's reaction to illnesses and treatment regimens; (2) recording and reporting the results of the nursing assessment; (3) participating in implementing the health care plan developed by the registered nurse and/or prescribed by any person authorized by State law to prescribe such a plan, by performing tasks delegated by and performed under the supervision or under orders or directions of a registered nurse, physician licensed to practice medicine, dentist, or other person authorized by State law to provide such supervision; (4) reinforcing the teaching and counseling of a registered nurse, physician licensed to practice medicine in North Carolina, or dentist; and (5) reporting and recording the nursing care rendered and the client's response to that care.

Licensed pratical nurses may be employed in hospitals, nursing homes, clinics, doctors' offices, industry, and public health agencies.

Individuals desiring a career in practical nursing should be encouraged to take math and science courses in high school.

Job Opportunities:
Nurse, Licensed Practical (DOT 079.374-014)

Total Credit Hours: 78

Curriculum by Quarters

Course Title			**Hours Per Week**			
			C	**L**	**P**	**QH**
FIRST QUARTER						
PNE	1101	Fundamentals of Practical Nursing	7	0	0	7
PNE	1102	Nutrition and Diet Therapy	3	0	0	3
PNE	1103	Anatomy and Physiology	4	0	0	4
PNE	1105	Drug Administration I	3	0	0	3
PNE	1201	Fundamentals Lab	0	6	0	3
PSY	101	Psychology	3	0	0	3
			20	6	0	23

SECOND QUARTER

PNE	1106	Medical-Surgical Nursing I	8	0	0	8
PNE	1111	Drug Administration II	4	0	0	4
PNE	1208	Medical-Surgical Practicum I	1	0	15	6
			13	0	15	18

THIRD QUARTER

ENG	101	Introduction to Written Communication	3	0	0	3
PNE	1107	Maternity Nursing	4	0	0	4
PNE	1108	Nursing of Children	4	0	0	4
PNE	1204	Pediatric Practicum (½ quarter)*	(1)	0	(15)	3
PNE	1206	Maternity Practicum (½ quarter)*	1	0	15	3
			12	0	15	17

FOURTH QUARTER

ENG	102	Composition	3	0	0	3
PNE	1110	Medical-Surgical Nursing II	8	0	0	8
PNE	1115	Personal and Vocational Relationships	3	0	0	3
PNE	1209	Medical-Surgical Practicum II	1	0	15	6
			15	0	15	20

*The PNE class and clinical courses in the third quarter are integrated. Therefore, students who need to repeat either course must repeat the entire quarter.

WELDING V-050

The Welding curriculum gives students sound knowledge of the principles, methods, techniques and skills essential for successful employment in the welding field and metals industry. Welders join metals by applying intense heat, and sometimes pressure to form a permanent bond between intersecting metals.

Welding offers employment in practically any industry; ship building, automotive, aircraft, guilded missiles, heavy equipment, railroads, construction, pipefitting, production shops, job shops and many others.

Job Opportunities:

Entry Level	**Advanced Level**
Arc Welder	Lay-out Worker I
Arc Welding - Machine Operator	Welder - Fitter
Gas Welding - Machine Operator	
Gas Welder	
Welder - Assembler	
Combination Welder	

Total Credit Hours: 68

Curriculum by Quarters

Course Title			Hours Per Week C	L	P	QH
FIRST QUARTER						
DFT	1104	Mechanical Drawing I	1	0	3	2
MAT	1101	Fundamentals of Mathematics	5	0	0	5
PSY	1101	Human Relations	3	0	0	3
WLD	1120	Oxyacetylene Welding and Cutting	4	0	15	9
			13	0	18	19
SECOND QUARTER						
DFT	1117	Blueprint Reading: Welding	0	0	3	1
ENG	1101	Communications I	3	0	0	3
PHY	1101	Applied Science I	3	2	0	4
WLD	1121	Basic Arc Welding	4	0	15	9
			10	2	18	17

THIRD QUARTER

ENG	1112	Communications II	3	0	0	3
MEC	1117	Metallurgy for Welders	2	0	3	3
WLD	1123	Inert Gas Welding	1	0	6	3
WLD	1124	Advanced Arc Welding	3	0	12	7
			9	0	21	16

FOURTH QUARTER

BUS	1103	Small Business Operations	3	0	0	3
MEC	1112	Machine Shop Processes	1	0	3	2
WLD	1113	Mechanical Testing and Inspection	1	0	3	2
WLD	1126	Advanced Inert Gas Welding	3	0	9	6
WLD	1128	Welding Procedures and Practices	1	0	6	3
			9	0	21	16

CERTIFICATE PROGRAMS

Certificate programs are especially designed educational plans of study drawn from existing curricula for persons who desire to improve their job skills in a particular area of interest.

The programs are also designed to meet the needs of employers in upgrading the occupational skills of their employees. Each certificate program may be tailored toward the requirements of a specific business, industry or organization.

Benefits

Short-term - 3 or 4 quarters

Practical application - immediate hands-on and real-world application

Training on newest equipment - IBM electronic typewriters, AT&T personal computers, Wangwriter, and IBM personal computers

Software used - Lotus 1,2,3
Wordstar
dBase II, III

CERTIFICATE IN CLERICAL PROCESSING T-033C

Total Credit Hours: 18

Curriculum by Quarters

Course Title			C	L	P	QH
			Hours Per Week			
FIRST QUARTER						
BUS	102	Typewriting I	2	0	3	3
EDP	103	Introduction to Microcomputing DOS	3	0	0	3
			5	0	3	6
SECOND QUARTER						
BUS	103	Typewriting II	2	0	3	3
BUS	240	Introductory Word Processing on the Microcomputer	2	0	3	3
			4	0	6	6
THIRD QUARTER						
BUS	104	Typewriting III	2	0	3	3
BUS	211	Reprographics	2	0	3	3
			4	0	6	6

CERTIFICATE IN COBOL PROGRAMMING T-022C

Total Credit Hours: 28

Curriculum by Quarters

Course Title			Hours Per Week			
			C	L	P	QH
FIRST QUARTER						
EDP	100	Introduction to Data Processing	3	2	0	4
EDP	107	Logic and Decision Making I	3	0	0	3
			6	2	0	7
SECOND QUARTER						
EDP	108	Logic and Decision Making II	3	0	0	3
EDP	110	COBOL Programming I	3	2	0	4
			6	2	0	7
THIRD QUARTER						
EDP	111	COBOL Programming II	2	4	0	4
BUS		Elective	3	0	0	3
			5	4	0	7
FOURTH QUARTER						
EDP	112	COBOL Programming III	2	4	0	4
BUS		Elective	3	0	0	3
			5	4	0	7

CERTIFICATE IN MICROCOMPUTING T-018C

Total Credit Hours: 21

Curriculum by Quarters

Course Title			Hours Per Week			
			C	L	P	QH
FIRST QUARTER						
BUS	100	Keyboarding	3	0	0	3
		or				
BUS	102	Typewriting I	2	0	3	3
EDP	103	Introduction to Microcomputing DOS	3	0	0	3
EDP	104	Personal Word Processing	3	0	0	3
			8/9	0	3	9
SECOND QUARTER						
EDP	150	Data Base Management Systems	3	0	0	3
EDP	152	Financial Spreadsheet Operations	3	0	0	3
			6	0	0	6
THIRD QUARTER						
EDP	162	Integrated Software	3	0	0	3
EDP		Elective (From list below)	3	0	0	3
			6	0	0	6
Electives						
EDP	156	Microcomputer Graphics	3	0	0	3
EDP	158	System Architecture	3	0	0	3
EDP	160	Seminar In Microcomputing	3	0	0	3

COURSE DESCRIPTIONS

ACA 100 Microcomputer as a Study Tool **1 0 0 1**

This course is designed to enable a student to become familiar with the microcomputer and its commercially prepared software. Prerequisite: None.

AGR 140 Home Maintenance **2 4 0 4**

This course concentrates on the jobs associated with maintaining a lawn and home surroundings throughout the year. Instruction includes shrub fertilization, tree fertilization, disease control of lawns and shrubs, pruning, proper irrigation of shrubs and lawns, and proper use of herbicides and pesticides. It is designed for the person interested in making home maintenance his/her choice of career work. Prerequisite: None.

AGR 145 Entomology and Pathology **4 2 0 5**

This course is a study of insects that attack ornamental plant materials. The nature, structure, and importance of each insect are studied in detail. Additional emphasis is placed upon detection, identification, and control of the insects studied. Methods for controlling diseases of ornamental crops are learned by studying the structure, life history, identification of the various parasitic disorders which plague ornamental trees, shrubs, flowers, and turf. Prerequisite: None.

AGR 150 House Plants **3 0 0 3**

Instruction in this course includes simple botany, taxonomy, physiology, identification, culture, and care of house plants. One hundred of the more common indoor plants will be studied and identified. Prerequisite: None.

AGR 151 Plant Materials I **3 4 0 5**

This course is an introduction to the woody plant materials grown in nurseries for landscape purposes and those found in woodlands and fields of North Carolina. The major emphasis is on deciduous shrubs and small trees. Prerequisite: None.

AGR 152 Plant Materials II **3 4 0 5**

Additional trees and shrubs are studied in this course. The major emphasis is placed upon a detailed study of broad leaved and narrow leaved evergreens. Prerequisite: AGR 151.

AGR 153 Greenhouse Management **3 2 0 4**

Greenhouse Management concentrates on procedures and practices of greenhouse plant production. This course also provides instruction in the construction and management of plastic and glass greenhouses, including heating, lighting, ventilation, and humidity. Crop studies include both cut flowers and pot plant crops. Prerequisite: None.

AGR 170 Plant Science **4 2 0 5**

This is an introductory general botany and plant science course covering the fundamental principles of reproduction, growth functions, and development of seed bearing plants. Prerequisite: None.

AGR 180 Bedding Plant Production 2 2 0 3

This course is designed to enable students to start plants from seed and grow them to marketable stage through use of proper cultural practices. Prerequisite: None.

AGR 185 Soil Science and Fertilizer 5 2 0 6

This course deals with the basic principles of efficient classification, evaluation and management of soils. Upon completion of this course, the student should be able to demonstrate proper care, cultivation, fertilization, and conservation of soil. Prerequisite: None.

AGR 200 Practicum 0 0 30 3

This course will expose students to the physical aspects of jobs available in their chosen field and provide them opportunities for the development of personal relationships. Students will acquire the skills and practical knowledge necessary for success in their chosen career fields. Prerequisite: Must be second-year horticulture student.

AGR 201 Agricultural Chemicals 3 0 0 3

This course is designed to enhance the student's understanding of agricultural chemicals. Instruction will focus on the importance of agricultural chemicals, ingredients, formulation, and application with special emphasis on the effective and safe utilization of chemicals in agricultural pest control. Although the major emphasis is weed identification and those chemicals utilized for weed control, part of the course will be devoted to insecticides, fungicides, and others. Prerequisite: None.

AGR 210 Field Analysis 5 0 0 5

Students will keep records of the experiences in AGR 200 Practicum. They will relate such experiences to the following major areas of instruction: plant materials, plant science, soil science and fertilizers, agricultural chemicals, landscape construction, landscape gardening, plant propagation, and nursery management. Records compiled by the student will be summarized in the form of a weekly report and reviewed by the instructor. These reports will culminate in a final term paper. Prerequisite: Must be a second-year horticulture student who is also registered for the work AGR 200 practicum.

AGR 220 Vegetable and Flower Gardening 4 0 0 4

Upon completion of this course, the student will be able to plan effectively a complete vegetable garden that will encompass the entire year. The student will also learn how to grow vegetables properly by use of insecticides, herbicides, and proper fertilization. If possible, the students will have a garden to take care of so that they might carry out the practices they learn. This is to be a self-study course with help from the supervising instructor. Prerequisite: This course is for second-year horticulture students who are doing their work AGR 200 practicum.

AGR 240 Landscape Construction I 4 2 0 5

This course deals with the actual construction of brick patios, walks, steps, brick borders, brick walls around trees, lawn furniture, picnic tables, or other wood projects which may be used in a home landscape. It will also cover estimating the job cost of these various projects, including drawing plans to scale. Prerequisite: None.

AGR 241 Landscape Construction II 4 2 0 5

This course will be a continuation of AGR 240 Landscape Construction I, with added emphasis on students actually carrying out projects from planning stage to completion. Other skills will be acquired through additional projects. Prerequisite: AGR 240.

AGR 251 Landscape Gardening I 3 4 0 5

This course is an introduction to and study of the basic principles of landscape design. Considerable emphasis is placed on the problems associated with residential site development, including blueprint reading. Laboratory time is devoted to visiting established residential sites. The course is not oriented toward a mastery of creativity and artistry, but toward an understanding of certain principles fundamental to all landscape design endeavors. Prerequisites: AGR 151 and AGR 152.

AGR 252 Landscape Gardening II 3 4 0 5

Upon completion of this course, the student will be able to develop and maintain landscaped areas including planting, pruning, fertilization, and pest control. In addition to acquiring skills in selection and use of materials in landscape construction, the student will also receive instruction in the fundamentals of landscape economics, including costs, contracts, and calculation of areas, volumes, and plant quantities. Prerequisites: AGR 151, AGR 152, and AGR 251.

AGR 254 Plant Propagation 3 2 0 4

This course is a study of the basic concepts and principles of sexual and asexual propagation. Propagation techniques are utilized in the industry and studied through practical exercises conducted in laboratory sessions. Prerequisite: None.

AGR 256 Nursery Management I 2 4 0 4

This is an introductory study of nursery operations designed to acquaint the student with the diversity of nursery plant production, equipment, and operation. The theory and practices necessary to produce profitable nursery stock will be acquired through the study of such areas as pruning, fertilization, plant protection, and others. Prerequisite: None.

AGR 257 Nursery Management II 2 4 0 4

This course is a continuation of AGR 256 Nursery Management I, with increased emphasis placed upon production schedules and choice and quantities of stock to be grown as well as developing cost data, price schedules, and record keeping for economically important nursery crops. Planning of nursery layout and facilities is also covered. Prerequisite: AGR 256.

AGR 258 Turf Practices 3 2 0 4

This course is a study of special-purpose turf grasses, including identification, use, establishment, and maintenance of specific grasses. Laboratory time is used for field trips to golf courses where students observe and participate in those operations required to maintain a healthy, vigorous playing surface. Prerequisite: AGR 185.

AGR 259 Garden Center Management 1 2 0 2

This course covers all phases of garden center operation, including some of the major problems. Areas of study include layout, stocking, product knowledge, traffic flow, seasonal fluctuations, risks, diversification, and merchandising. Ample time will be devoted to visitations to established garden center operations. Prerequisite: None.

AHR 106 Architectural Mechanical Equipment 3 0 3 4

The course provides general study of heating, air conditioning, plumbing and electrical equipment, materials and symbols, building code requirements pertaining to residential and commercial structures, reading and interpretation of working drawings by mechanical engineers, and coordination of mechanical and electrical features with structural and architectural designs. Prerequisite: None.

AHR 1101 Automotive Air Conditioning 2 0 3 3

This course is a general introduction to the principles of refrigeration. The assembly of the components and connections necessary in the mechanisms, the methods of the operation and control, and the proper handling of refrigerants in charging the system are covered. Prerequisite: None.

AHR 1102 Fundamentals of Refrigeration 6 0 9 9

The course includes identification, selection, and use of hand, measuring and special refrigeration tools; use of power drills, grinders, and pipe threaders; and use of copper tubing, fittings, and tubing fabrication. Also included in the course is physics related to refrigeration; the basic refrigeration cycle; classification, characteristics, and properties of refrigerants; and types, purpose, and principles of operation of compressors, condensors, receivers, and evaporators. The assembly and operation of a basic refrigeration system, leak checking, evacuating, and charging, compressor operational checks, and system trouble analysis are covered. Prerequisite: None.

AHR 1103 Domestic and Commercial Refrigeration 6 0 12 10

The course covers types and operating principles of domestic hermetic units, domestic absorption units, operation and trouble analysis of hermetic electrical components and circuits, repair and maintenance of hermetic units, calculation of heat loads, and equipment selection and system balance. The course covers operating principles, installation, and maintenance of the following: floats, automatic and thermostatic expansion valves, thermostatic and pressure motor controls, heat exchangers, oil separators, driers, suction filters, and minor accessories. Also included are the installation, operation, service, and trouble analysis of the following equipment: walk-in coolers, display cases, frozen food cabinets, reach-in cabinets, water coolers, ice makers, multiple compressors, and evaporator system operations. Prerequisite: AHR 1102.

AHR 1104 Air Conditioning Controls I 5 0 3 6

The course includes theory of electrical and electronic controls; principles of operation, application, connection, and adjustment; use of pressure regulators and electrical thermostats, dual thermostats, heating-cooling thermostats and humidistats, valves, dampers, pilot positioners, and two-position controls. The principles of operation, application, wiring, and adjusting of controls are covered. Prerequisite: None.

AHR 1105 Principles of Air Conditioning 6 0 9 9

The course provides an introduction to air conditioning, psychrometrics, principles of load estimating, applied load estimating, residential and commercial equipment, and balancing the system. Prerequisite: None.

AHR 1106 Air Conditioning Controls II 3 0 0 3

The course covers theory of pneumatic controls, principles of operation, application, connection and adjustment, pressure regulators and pneumatic thermostats, dual thermostats, heating-cooling thermostats, humidistats, valves, dampers and pilot positioners, non-bleed controllers, and two-position controls. The principles of operation, application, wiring, and adjusting of controls are covered. Prerequisite: AHR 1104.

AIB 202 Principles of Banking 4 0 0 4

This course presents the fundamentals of bank functions in a descriptive fashion so that the beginning banker may acquire a broad and operational perspective. It reflects the radical changes in banking policy and practice which have occurred in recent years. Topics covered are banks and the monetary system, negotiable instruments, the relationship of the commercial bank to its depositors, types of bank accounts, the deposit function, the payments function, bank loans and investments, other banking services (trust, international, and safe deposit), bank accounting and marketing, external and internal controls, and the public service obligation of banks. Prerequisite: None.

AIB 203 Bank Investments 4 0 0 4

AIB's bank investments course covers the sources and use of bank funds and the place of investment in the overall scheme of bank operations. Especially important are the relationship of investments to business and the unique functions, advantages, and purpose served by a wide range of securities. Investment terminology is covered in detail. Prerequisite: None.

AIB 205 Bank Management 4 0 0 4

This course presents new trends which have emerged in the philosophy and practice of management. The study and application of the principles outlined provide new and experienced bankers with a working knowledge of bank management. It should be noted that the course is not one of personnel management but rather of business management. It touches on objectives, planning, structure, control, and the interrelationship of various bank departments. Since case study is becoming well established as an effective management learning technique, the course also uses illustrative cases. Prerequisite: None.

AIB 209 Installment Credit 4 0 0 4

This modular course emphasizes the pragmatic "how-to" details of installment credit. Topics covered are principles of credit evaluation, open-end credit, marketing bank services, collection policies and procedures, legal aspects, financial statement analysis, direct and indirect installment lending, leasing and other special situations, installment credit department management, insurance and rate structure, and yields. Prerequisite: None.

AIB 210 Money and Banking 4 0 0 4

This course presents the basic economic principles most closely related to the subject of money and banking in a context of topics of interest to present and prospective bank management. The course stresses the practical application of the economics of money and banking to the individual bank. Some of the subjects covered include structure of the commercial banking system; the nature and functions of money; banks and the money supply; cash assets and liquidity management; bank investments, loans, earnings, and capital; the Federal Reserve System and its policies and operations; Treasury Department operations; and the changing international monetary system. Prerequisite: None.

AIB 231 Savings and Time Deposit **4 0 0 4**

This course reflects recognition of the fact that a knowledge of the historical development of savings institutions and an awareness of the basic economic function of the savings process are necessary to an understanding of the current operations and policies of these institutions. It begins with a review of the economics of the savings process in order to clarify important differences between financial savings by individuals or organizations and real savings that appear as capital formation. Different types of financial savings are reviewed in order to describe the system of financial flow from income to capital investment. Also covered are interest rates, types of savings accounts, and the management of savings institutions (asset management, operations control, supervision, liquidity, and marketing). Prerequisite: None.

AIB 233 Analysis of Financial Statements **4 0 0 4**

This course is divided into two main sections: characteristics of financial statements and financial statement analysis. The first section serves as a useful review of basic accounting principles for those students who have studied accounting. For those who have not, this section provides the minimum accounting background necessary for profitable study of financial statement analysis. (It should be emphasized, however, that Analysis of Financial Statements is an advanced course and difficult for students with little background in accounting.) The second section of the course covers goals, methods, and tools of analysis; analysis of profit and loss, accounts receivable, inventories, and balance sheets; the relationship of balance sheet accounts to sales and to projected statements and cash budgets. Prerequisite: BUS 120.

AIB 235 Loan and Discount **3 0 0 3**

This course presents the essential facts about promissory notes, including calculating interest and discounting commercial paper; guaranties; general collateral agreements; examining and processing documents accompanying notes secured by stocks, bonds, and savings account passbooks; and the concepts of attachment, perfection, priority, default, and foreclosure. The course uses programmed instruction and several simulation exercises. Prerequisite: None.

AIB 236 Trust Functions and Services **4 0 0 4**

This course provides an overview of many of the generally accepted principles of the law of estates, trusts, and agencies as it takes the student on a step-by-step study of trust functions and services encountered in the daily operation of a trust department. Prerequisite: AIB 202.

AIB 237 International Banking **4 0 0 4**

This course presents the basic framework and fundamentals of international banking: how money is transferred from one country to another, how trade is financed, what the international agencies are and how they supplement the work of commercial banks, international lending, and how money is changed from one currency to another. Prerequisite: None.

AIB 238 Law and Banking 4 0 0 4

This course is designed not only to present an introduction to basic commercial law, but to relate it more specifically to banking and bank transactions. Topics include contracts, agency and partnerships, corporations, real property, personal property and sales, the Uniform Commercial Code, negotiable instruments and bank collections, and secured financing. Prerequisite: None.

AIB 239 Marketing for Bankers 4 0 0 4

This course presents marketing as a broad concept, far more complex than public relations, advertising, and personal selling, which are important components of marketing but are not individually or collectively the equivalent of marketing. It is designed for bankers who are unacquainted with marketing and deals with concepts and philosophies of marketing, marketing information, research, and target; the marketing mix (product strategy, distribution strategy, advertising and sales promotion, personal selling, and pricing strategy); and the methods of marketing planning. Prerequisite: None.

ARC 106 Architectural Drafting I 2 0 6 4

This is a course designed to provide fundamental knowledge of the principles of drafting. Basic skills and techniques of drafting include use of drafting equipment, lettering, freehand orthographic and pictorial sketching, geometric construction, and orthographic instrument drawings of principal views. Projection problems dealing with principles of descriptive geometry involving points, lines, planes, connectors, and the principles of planning drafting are introduced. Prerequisite: None.

ARC 107 Architectural Drafting II 2 0 6 4

This course develops techniques in architectural lettering, symbols and their interpretation, dimensioning and freehand, and instrument drafting. Drawings of construction details, using appropriate material symbols, connections, sections, scale details, and full-size details are prepared from preliminary sketches. Applications of descriptive geometry used in visualization and analytical solutions of the drafting problems involving auxiliary views, intersections, and developments are also included. Prerequisite: None.

ARC 108 Architectural Drafting III 0 0 9 3

This course includes the development of design and programming skills applied to realistic situations and the introduction to rendering and projections. Prerequisite: None.

ARC 150 Site Planning 2 0 6 4

This course provides an introduction to factors influencing placement of buildings on sites and specific analysis of sites in terms of solar, topographic, use, and wind characteristics. Field work in surveying is also included. Prerequisite: None.

ARC 152 Computer Aided Drafting I 2 6 0 5

This course will give the students advanced training in the use of micro CAD applications. These applications will use several types of CAD software with an emphasis placed on specific types of architectural projects. Prerequisite: DFT 151

ARC 153 Computer Aided Drafting II **2 2 0 3**

This course will give students basic training on a main frame computer system. This course includes procedures for accessing the graphics subsystem, manipulating graphic displays, exercising the graphic commands from the menu and with the keyboard and exiting the graphic sybsystem at the completion of the work session. Prerequisite: ARC 152.

ARC 154 Computer Aided Drafting III **1 2 0 2**

This course will instruct the student on setting up 3-D design and cell files and provide instruction and experience in construction and manipulating 3-D figures. The course also introduces the student to hidden line/hidden surface capabilities of the VAX. Prerequisite: ARC 153.

ARC 181 History of Architecture and Construction **5 0 0 5**

This course covers the evolution of building development from primitive to modern and the history of architectural construction and design. The principal periods studied include Prehistory, Ancient Egypt and Mesopotamia, Greece, Rome, Romanesque, Gothic, Renaissance, and Early American. Prerequisite: None.

ARC 220 Architectural Drafting IV **2 0 9 5**

This course covers the drawing of structural plans and details as prepared for building construction, including steel, concrete, and timber structural components. Appropriate details and drawings necessary for construction and fabrication of structural members and reference materials used to provide the draftsman with skills and knowledge in locating data and in using handbooks are also included. Prerequisite: None.

ARC 221 Architectural Drafting V **2 0 9 5**

This course provides an in-depth approach to the study of architectural drafting, continuing the study of details of construction, and introducing the elements of mechanical and electrical equipment systems and their relationship to a finished building. Prerequisite: ARC 220.

ARC 222 Architectural Drafting VI **2 0 9 5**

The preparation of the complete set of working drawings for the architectural structure, the preparation of millwork drawings, cabinets and built-in equipment detail drawings, and door, window, and room schedules are required. Site and landscaping plans are studied and drawn. A final assembly of the complete document for construction purposes is required. Prerequisite: ARC 221.

ARC 233 Office Practice Seminar **2 0 0 2**

This course provides a study of the professional relationship of the architectural firm in relation to clients, contractors, suppliers, consultants, and other architects. The ethics of the professional as applicable to the draftsman's role in the architectural firm are stressed. Prerequisite: None.

ARC 235 Codes, Specifications, and Contract Documents **3 0 3 4**

Building codes and their effect in relation to specifications and drawings, the purpose and writing of specifications are studied, along with their legal and practical application to working drawings. Contract documents are analyzed and studied for the purpose of client-architect-contractor responsibilities, duties, and mutual protection. Prerequisite: None.

ARC 236 Construction Estimating and Field Inspecting 3 0 3 4
This course provides an interpretation of working drawings for a project, preparation of material and labor quantity surveys from plans and specifications, and approximate and detailed estimates of cost. A study of materials takeoff, labor takeoff, subcontractor's estimates, overhead costs, and bid and contract procedures, and a detailed inspection of the construction by comparing finished work to the specifications are also included. Prerequisite: None.

ARC 240 Computer Aided Drafting Applications 1 4 0 3
This course provides an overview of types of applications in the architectural, mechanical, electrical, civil, and structural areas which can be found in the marketplace. The students will go on several field trips to observe the application process. Students will specialize in one area of interest using either a micro or main frame system. Prerequisite: ARC 154.

ARC 241 Systems Management on Micro and Mini Computers 1 0 0 1
This systems management class will develop management and user standards. Concepts such as disk management and drafting standards will be discussed. The course will also include development of office standards (CAD) for various disciplines. Prerequisite: ARC 240 or consent of instructor.

ARC 250 Architectural Media I 3 0 0 3
This course will give the student a basic understanding of the use of photography, sketching, rendering, model building, and the combination of graphic arts in the presentation of architectural design. Prerequisite: None.

ARC 251 Architectural Media II 1 4 0 3
This course will teach the student to present mood, atmosphere, pictorial surroundings, and an indication of activity that shows functional purpose to the architectural rendering or illustration. To accomplish this, the study of the various media and techniques will be undertaken and developed by the student. The use of color, light, and shadow to enhance the presentation will be stressed. Prerequisite: ARC 250.

ARC 255 Twentieth Century Architecture 3 0 0 3
This course will cover student awareness, consideration, and criticism of the diverse forces on the aesthetic, constructional, and design theories active in the field of architecture today, and the evolution of building development from the late 1800's to present. Primary master builders studied are Le Corbusier, Frank Lloyd Wright, and Robert Venturi. Prerequisite: None.

AUT 1111 Automotive Body Repair I 3 0 12 7
The course includes the basic principles of automobile construction, design, and manufacturing; a thorough study of angles, crowns, and forming of steel into the complex contour of the present-day vehicles; and the application of basic principles of straightening, aligning, and the spraying of primer surfacer. Prerequisite: None.

AUT 1112 Automotive Body Repair II 3 0 15 8

The course provides a thorough study of the requirements of a metal worker including the use of essential tools, forming fender flanges and beads, and straightening typical auto body damage. The student begins acquiring skills such as shaping angles, crowns, and contour of the metal of the body and fenders. Metal working and the spraying of primer surfacer are also covered. Prerequisites: AUT 1111 and WLD 1130.

AUT 1113 Metal Finishing and Painting 2 0 12 6

This course is intended to teach the student the principles and techniques of refinishing auto bodies. Topics covered are paint removal, masking, preparing surfaces, paint selection, spray equipment, and practice spraying. Prerequisites: AUT 1112 and WLD 1105.

AUT 1114 Frame Straightening and Alignment 2 0 6 4

This course is an introduction to the repair of automobile frames and suspension systems. Instruction will include assessing frame damage, framing, frame straightening equipment, safety, frame straightening, and frame repair. Prerequisite: AUT 1112 and WLD 1105.

AUT 1116 Auto and Truck Painting 3 0 21 10

This course is intended to give the student practice in surface preparation and paint application. The following topics will be covered: review of finishes, surface preparation, undercoats, topcoats, and common painting problems. Prerequisite: AUT 1113, AUT 1114 and WLD 1131.

AUT 1123 Automotive Chassis and Suspension Systems 4 0 15 9

This course covers the principles and functions of the components of automotive chassis and practical job instruction in adjusting and repairing suspension and steering systems. Units to be studied include shock absorbers, springs, steering systems, steering linkage, and front-end alignment. Prerequisite: None.

AUT 1124 Automotive Power Trains 3 0 9 6

The course covers principles and functions of automotive power train systems including clutches, transmission gears, torque converters, drive shaft assemblies, rear axles, and differentials. The identification of troubles, servicing, and repair are covered. Prerequisite: None.

AUT 1125 Automotive Servicing 3 0 9 6

Emphasis is placed on the shop procedures necessary in determining the nature of troubles developed in the various component systems of the automobile. Troubleshooting of automotive systems and providing a full range of experience in testing, adjusting, repairing, and replacing are covered. Prerequisite: None.

BIO 010 Human Anatomy 3 0 0 0

This course is designed to acquaint students with basic knowledge of human anatomy by tracing system pathways. The student may also gain proficiency in medical and biological terminology. Prerequisite: None.

BIO 101 General Biology I **3 2 0 4**

This is a functional course in biology with emphasis on scientific reasoning, cellular structure and function, human anatomy and physiology, and the diversity of living organisms. Prerequisite: None.

BIO 102 General Biology II **3 2 0 4**

This is a continuation of BIO 101 with emphasis on reproduction and development, inheritance, ecological principles, and evolution by natural selection. Prerequisite: BIO 101.

BIO 107 Anatomy and Physiology I **3 2 0 4**

This is an introduction to normal structure and function of the human body. When relevant, clinical applications are made to relate normal structure and function to basic pathological conditions. Students are given the opportunity to employ their assimilated knowledge in class discussion and laboratory work. Laboratory participation introduces additional information which the student gains by participating in various lab exercises and learning experiences. Prerequisite: None.

BIO 108 Anatomy and Physiology II **3 2 0 4**

This is a continuation of BIO 107 Anatomy and Physiology I with emphasis on the vascular system, respiratory system, digestive system, urinary system, fluid and electrolyte balance, endocrine system, and the reproductive system. Prerequisite: BIO 107.

BIO 111 Microbiology **3 2 0 4**

This is a one-quarter course designed to provide an understanding of microbiological principles and applications. Emphasis is placed on microbial classifications, structure and function, host-parasite relationships, and relations to man. Laboratory sessions are concerned with principles of identification, slide techniques, culture methods, and sterile procedures. Prerequisite: BIO 108.

BIO 112 Pathology **3 0 0 3**

Pathology is a one-quarter course designed to introduce the students to the study of the disease processes in the human body. Emphasis will be placed upon the cause, pathogenesis, occurrence, and prognosis of common human diseases. Prerequisite: BIO 107, BIO 108, and BIO 111.

BIO 115 Medical Terminology I **1 0 0 1**

This is the first of a series of two courses in which the student is introduced to terms related to all areas of medical science, hospital service, and paramedical specialties. Terms introduced parallel the topics covered in BIO 107 Anatomy and Physiology I. Prerequisite: None.

BIO 116 Medical Terminology II **1 0 0 1**

This is the second of a series of two courses in which the student is introduced to terms related to all areas of medical science, hospital service, and paramedical specialties. Terms introduced parallel the topics covered in BIO 108 Anatomy and Physiology II. Prerequisite: BIO 115.

BIO 139 Topographical Anatomy **2 0 0 2**

The student receives a coordinated approach to aid him in visualizing his patient's anatomy. This reconstructional technique builds the body from its skeleton toward the surface. Living anatomy is stressed throughout, so that surface landmarks and palpations are constant reminders of deeper structures. Prerequisites: BIO 107 and BIO 108.

BIO 169 Fundamentals of Disease Processes **4 0 0 4**

The student is introduced to the major processes involved in producing pathological entities and disorders in man and how such states interfere with normal physiology. After this knowledge of diseases and abnormal states is acquired, it is correlated with the more commonly seen pathology in clinical practices. Emphasis will then be placed upon the fundamental principles of microbiology, the relationship of microorganisms to disease, modes of transmission, control, and the etiological agents of infectious diseases. Prerequisites: BIO 107 and BIO 108.

BUS 010 Pre-Technical Accounting **5 0 0 0**

This course is designed to present an overview of the complete bookkeeping cycle including journalizing, posting, summarizing, preparing financial statements, and the closing of books. Prerequisite: None.

BUS 030 Introduction to Shorthand **5 0 0 0**

This course provides for the introduction to basic shorthand theory, dictation of practiced materials and transcription skills, and development of a fluent reading rate. This is an introduction to BUS 106 Shorthand I. Prerequisite: None.

BUS 100 Keyboarding **3 0 0 3**

Keyboarding is an introduction to the touch typewriting system on the microcomputer with emphasis on correct techniques, alphabetic data entry, numeric data entry using the ten-key numeric pad, and proofreading procedures. Prerequisite: None.

BUS 101 Introduction to Business **5 0 0 5**

A survey of the business world is presented in this course with particular attention devoted to the structure of the various types of business organization, methods of financing, internal organization, and management. Prerequisite: None.

BUS 102 Typewriting I **2 0 3 3**

Typewriting I is an introduction to the touch typewriting system with emphasis on correct techniques, mastery of the keyboard, simple business correspondence, tabulation, and manuscripts. Prerequisite: None.

BUS 103 Typewriting II **2 0 3 3**

The development of speed and accuracy with further mastery of correct typewriting techniques is the objective of Typewriting II. These skills and techniques are acquired by completing typing projects that include tabulation, manuscripts, correspondence, and business forms. Prerequisite: BUS 102 or the equivalent.

BUS 104 Typewriting III **2 0 3 3**

This course emphasizes production typing problems and speed building. Attention is given to the development of the student's ability to function as an expert typist, producing mailable copies. The production units are tabulation, manuscript, correspondence, and business forms. Prerequisite: BUS 103 or the equivalent.

BUS 105 Typewriting IV **2 0 3 3**

Typewriting IV is a continuation of production typing problems and speed building through an office simulation practice set. Mailable copies are required. Prerequisite: BUS 104 or the equivalent.

BUS 106 Shorthand I 3 2 0 4

This is a beginning course in the theory and practice of reading and writing shorthand. It emphasizes phonetics, penmanship, word families, brief forms, and phrases. Prerequisite: None.

BUS 107 Shorthand II 3 2 0 4

This course is a continued study of theory with emphasis on speed in dictation and accuracy in transcription. A minimum dictation rate of 60 words per minute is required. Prerequisite: BUS 106 or the equivalent.

BUS 108 Shorthand III 3 2 0 4

This course is a continuation of theory and speed building as well as an introduction to office-style dictation. The development of speed in dictation to a minimum dictation rate of 80 words per minute and mailability are the objectives of this course. Prerequisite: BUS 107 or the equivalent.

BUS 109 Business Mathematics 5 0 0 5

Business mathematics emphasizes fundamental mathematical operations and their application to business problems. Topics covered include sales records, inventories, commissions, markups, depreciation, and interest. Prerequisite: None.

BUS 112 Machine Transcription I 2 0 3 3

This course is the first of three courses designed to introduce and develop skills in machine transcription. Skills are developed in operating a transcribing unit and in word processing. Prerequisites: BUS 103 and ENG 102.

BUS 113 Vocabulary/Terminology I 3 0 0 3

This course is designed to develop an understanding of the terminology and vocabulary used in business, technical, and professional offices. Prerequisite: None.

BUS 114 Vocabulary/Terminology II 3 0 0 3

As a continuation of BUS 113 Vocabulary Terminology I, this course emphasizes terminology and vocabulary in the business environment with special emphasis on medical and legal professions as well as word processing. Prerequisite: BUS 113.

BUS 115 Business Law I 3 0 0 3

This course is designed to acquaint the student with the fundamentals and principles of business law. Areas of instruction include contracts, negotiable instruments, and agencies. Prerequisite: None.

BUS 116 Business Law II 3 0 0 3

Business Law II is a study of laws pertaining to bailment, sales, risk-bearing, partnership-corporation, mortgages, and property rights. Prerequisite: BUS 115.

BUS 118 Secretarial Accounting I 4 0 3 5

This course is the first of two courses designed specifically for secretarial majors to study the principles, practices, and tools of the accounting process as encountered in the secretarial profession. Prerequisite: BUS 109.

BUS 119 Secretarial Accounting II 4 0 3 5

This course is the second of two courses designed to further develop skills in accounting as needed by secretarial majors. The principles defined in BUS 118 Secretarial Accounting I are broadened and put to use through workbook problems and a practice set. Prerequisite: BUS 118.

BUS 120 Accounting I 4 0 3 5

This course is a study of the principles, techniques, and tools of the accounting process. The areas of instruction include the collecting, summarizing, analyzing, and reporting of financial information with emphasis on the application of the principles learned. Prerequisite: None.

BUS 121 Accounting II 4 0 3 5

This course concentrates on the application of the procedures involved in the recording of receivables, payables, inventories, deferrals, accruals, plant assets, and payrolls. Prerequisite: BUS 120.

BUS 122 Accounting III 4 0 3 5

This course expands the principles and concepts set forth in BUS 120 Accounting I and BUS 121 Accounting II. Manufacturing and job order cost systems, budgetary control, and standard cost systems are major areas of instruction. Additional attention is given to the decision-making process as determined from cost and revenue relationships, management reports, changes in financial position, consolidated statements, and financial statements. Prerequisite: BUS 121.

BUS 123 Business Finance 5 0 0 5

This course is a study of the principles and problems of financing business firms. Topics included in instruction are source and use of funds, cost of capital, dividends, leasing, financial statement analysis, and mergers. Prerequisite: BUS 122.

BUS 128 Personal Financial Management 5 0 0 5

This course covers the basic concepts of personal finance. The student will become familiar with establishing financial objectives, investment risks, financial institutions, investment alternatives, making investment decisions, and estate planning. Prerequisite: None.

BUS 130 Career Planning and Job Hunting 2 0 0 2

This course is an in-depth study in developing realistic career objectives and goals. The student will learn techniques to sell himself/herself in the job market and how to set the stage for long-term, fulfilling career development. Prerequisite: None.

BUS 141 Medical Vocabulary and Terminology 3 0 0 3

This course provides students with a means to develop an understanding of vocabulary and terminology for clerical employment opportunities in the medical field. Prerequisite: None.

BUS 162 Fundamentals of Real Estate 5 0 0 5

This course consists of instruction in fundamental real estate principles and practices, including real estate law, financing, brokerage, closing, valuation, management, and taxation. Instruction is included on residential building construction, property insurance, land use, and real estate market and the North Carolina Real Estate License Law and Rules/Regulations of the North Carolina Real Estate Licensing Board. Prerequisite: None.

BUS 164 Real Estate Law **5 0 0 5**

This is a survey course of law as it relates to real estate activities including the legal aspects pertaining to the sale, purchase, and management of real property. Special emphasis is placed on the legal steps needed to handle real estate transactions from the preparation of the listing contract to the closing statement. Prerequisite: None.

BUS 165 Real Estate Brokerage Operations **3 0 0 3**

This course consists of basic instruction in the various aspects of real estate brokerage operations, including establishing a brokerage firm, management concepts and practices, personnel and training, marketing operations, records/bookkeeping systems (including trust account bookkeeping), and financial operations. Prerequisite: BUS 162.

BUS 190 Horticultural Business Management **3 0 0 3**

This course is designed to instruct students on how to set up a small business in the area of horticulture. The student will learn various concepts of business management, planning, decision making, and leadership. Prerequisite: None.

BUS 206 Dictation/Transcription **3 2 0 4**

This course is a continuation of theory with emphasis on speed building in dictation, mailability in transcription, and office-style dictation. A minimum dictation rate of 100 words per minute is required. Prerequisite: BUS 108.

BUS 209 Real Estate Finance **5 0 0 5**

This course is a study of real estate finance, including an analysis of financial institutions, techniques, and instruments necessary in real estate. Topics of instruction include the source of funds, types of mortgages, roles of government, agencies, interest rates, loan costs, closings, and competition in the money market. Prerequisite: None.

BUS 210 Business Statistics **5 0 0 5**

This course is designed to introduce students to basic concepts and methods of statistics. Students are taught to summarize data and then employ a decision-making process based on statistical inference. Prerequisite: None.

BUS 211 Reprographics **2 0 3 3**

This course is designed to give instructions in the operation of duplicating equipment, electronic typewriters, and transcribing machines. Prerequisite: BUS 103. Corequisite: BUS 213.

BUS 212 Machine Transcription II **2 0 3 3**

This course is the second of three courses designed to introduce and develop skills in machine transcription. Skills are developed through direct transcription from oral dictation to mailable typewritten form, which involves correct punctuation, spelling, and typing styles. Prerequisite: BUS 112.

BUS 213 Filing **2 0 0 2**

This course covers the fundamentals of indexing and filing, combining theory and practice by use of miniature letters, filing boxes, and guides. The course includes alphabetic, numeric, and geographic filing as well as records control. This course is a corequisite of BUS 211 Reprographics, or it can be taken in the Individualized Learning Center. Prerequisite: None.

BUS 214 Secretarial Procedures **5 0 0 5**

This course is designed to acquaint the student with the responsibilities encountered by a secretary during the workday. The areas of instruction are receiptionist's duties, handling the mail, telephone techniques, travel information, telecommunications, office records, purchasing of supplies, and office organization. Prerequisites: BUS 104 and ENG 102.

BUS 215 Machine Transcription III **2 0 3 3**

This course is the third of three courses designed to introduce and develop skills in machine dictation and transcription. Skills are developed by the operation of dictating, transcribing, and word processing equipment. Prerequisite: BUS 212.

BUS 216 Real Estate Sales **3 0 0 3**

This course is a study of the current sales techniques in the real estate industry, including problems in selling as well as emphasis on consumer motivation and reactions. Particular emphasis is placed on morals and ethics related to the sale of real property. Other topics include the methods of securing property listings and prospective customers, bringing the prospect and property together, the use of advertising in the selling function, the basic development of a sales plan, and sales presentation. Prerequisite: None.

BUS 219 Office Application **1 0 20 3**

During the last quarter only, students are assigned to work in a business or professional office for 20 hours per week. The objective is to provide actual work experience for secretarial students and an opportunity for the practical application of the skills and knowledge previously learned. Prerequisite: Student must be in final quarter of course work.

BUS 221 Intermediate Accounting I **5 0 0 5**

This course is a thorough treatment of the field of general accounting providing a foundation for specialized studies that follow. The course includes the framework of accounting, the balance sheet, income and retained earnings statements, cash, temporary investments, receivables, and inventories. Prerequisite: BUS 122.

BUS 222 Intermediate Accounting II **5 0 0 5**

The course is designed to familiarize the student with the objectives of accounting and the principles that have evolved in response to the objectives. The course includes inventories estimating and valuation, current liabilities, fixed assets, intangible assets, long-term investments, bonds, leases, and pensions. Prerequisite: BUS 221.

BUS 224 Advanced Accounting **2 0 3 3**

A study of advanced principles and practices with special emphasis on the development of worksheet techniques for solution of problems. Accounting and reporting for consolidations and not-for-profit organizations are studied in detail. Prerequisite: BUS 227.

BUS 225 Managerial Cost Accounting I 2 0 3 3

This course is a study of the principles, techniques, and tools of the cost accounting processes within the job cost and process cost system. Instruction emphasizes the application of principles learned. Prerequisite: BUS 122.

BUS 226 Managerial Cost Accounting II 2 0 3 3

This course is a continuation of BUS 225 Managerial Cost Accounting I, with emphasis on standard cost principles and procedures, selling and distribution cost, direct costs, budgets, and executive use of cost figures. Prerequisite: BUS 225.

BUS 227 Intermediate Accounting III 2 0 3 3

This course is designed to familiarize the student with the objectives of accounting and the principles that have evolved in response to the objectives. The course includes leases, paid in capital, retained earnings, book value and earnings per share, accounting changes and correction of errors, statement from incomplete records, the statement of changes in financial position, and financial statement analysis. Prerequisite: BUS 222.

BUS 228 Real Estate Investment and Taxation 3 0 0 3

This course is a study of fundamental investment concepts such as location, timing, and methods of financing needed by the prospective investor for successful real estate investment. Special emphasis will be placed on investment during the development process, what to buy, and how to buy. Other topics to be discussed are how to take title for individual ownerships or partnerships, when to invest in real estate corporations and trusts, tax consequences and investment, and the influence of federal and state laws on real estate investments. Prerequisite: None.

BUS 229 Taxes 2 0 3 3

This course is a study and application of federal and state taxes as applied to individuals, partnerships, and corporations. The major emphasis is on the preparation of individual income tax returns. Prerequisite: None.

BUS 230 Advanced Taxes 2 0 3 3

This course is a study and application of federal and state taxes as applied to individuals, partnerships, corporations, "Subchapter S" corporations, and estate and gift taxes. Prerequisites: BUS 229 and BUS 121.

BUS 231 Real Estate Merchandising 3 0 0 3

This couse is a survey of the field of real estate advertising with emphasis on the relationship to the market structure of our economy. Prerequisite: None.

BUS 232 Sales Development 3 0 0 3

This course is a study of retail, wholesale, and specialty selling. The emphasis is on mastering the fundamentals of selling. The preparation and execution of a sales demonstration are required. Prerequisite: None.

BUS 233 Personnel Management 3 0 0 3

Personnel management is the study of the principles of organization and the management of personnel. Specific areas of study include procurement, placement, training, performance checking, supervision, remuneration, labor relations, fringe benefits, and security. Prerequisite: None.

BUS 234 Sales Management 3 0 0 3

This course is a continuation of BUS 232 Sales Development. Prerequisite: BUS 232.

BUS 235 Business Management 5 0 0 5

This course is an introduction to the concepts of business and organizational management. Through study in such areas as planning and decision making, organizational structures and behavior, leadership, motivation, and resources control, the student will acquire the skills to analyze and practice good management procedures. Prerequisite: None.

BUS 236 Land Development 3 2 0 4

This course is a study of land and population economics, land utilization, and the development factors related to manufacturing, labor, transportation, and commerce in or near the development location. Prerequisite: None.

BUS 237 Wholesaling 3 0 0 3

This course is a comprehensive analysis of the wholesaling function emphasizing the principles and techniques employed by today's wholesale managers. The role of wholesaling in our distribution system and its relation to production and retailing are thoroughly analyzed. Prerequisite: None.

BUS 238 Land Use Policy and Governmental Influences on Real Estate 3 2 0 4

This course is a study of local and national trends in the development, use, and value of real property, as well as governmental policies and their effect on the real estate market. Skills are developed in the analysis, research, and correlation of the various trends, policies, and factors affecting real estate. Prerequisite: None.

BUS 239 Marketing 5 0 0 5

This course is a study of the principles and problems of marketing goods and services in a free enterprise economy. Topics of instruction include product selection and development, promotion, channels of distribution, and pricing. Prerequisite: None.

BUS 240 Introductory Word Processing on Microcomputers 2 0 3 3

This is an introductory course designed to instruct the student in the use of a microcomputer to create, edit, store, and print text. In addition to using the equipment, the student will study basic word processing terminology and work flow. Prerequisite: BUS 102

BUS 241 Social Stratification 3 0 0 3

This course is an analytic approach to the existence of social classes in nearly all societies while offering specific concepts and research on buying, living, and social stratification in the United States. Prerequisite: None.

BUS 242 Display and Design 3 2 0 4

This course is an introduction to basic layout and design of internal commercial displays in retail stores and service institutions. Prerequisite: None.

BUS 243 Advertising 4 0 0 4

Advertising is the study of the methods and techniques used by advertisers and agencies to persuade the public to buy. Topics covered are market research, selection of media, and evaluation and testing of advertisment effectiveness. Theory, writing, and designing advertising copy are included in class activities. Prerequisite: None.

BUS 244 Marketing Research 3 0 0 3

This course is a study of research methods, procedures, and techniques. A practical research problem integrating finance, statistics, sampling, and collecting of data is required. Prerequisite: None.

BUS 246 Public Relations 3 0 0 3

Public relations focuses on the planned effort necessary to influence public opinion through good character and responsible performance by emphasizing the necessity of mutually satisfactory two-way communications. Public relations for businesses is given special attention. Prerequisite: None.

BUS 247 Business Insurance 3 0 0 3

This course is a presentation of the basic principles of risk insurance and their application as well as a survey of the various types of insurance. Prerequisite: None.

BUS 250 Word Processing I 1 4 0 3

This course is the first of two courses designed to instruct students in using a word processing system for creating, editing, printing, and storing documents. Through the use of a training workbook, students will learn to produce mailable business documents. Prerequisite: BUS 104 and ENG 102.

BUS 251 Word Processing II 1 4 0 3

This course is the second of two courses designed to instruct students in using a word processing system. Students will apply skills acquired in BUS 250 Word Processing I to daily office tasks. Prerequisite: BUS 250.

BUS 262 Fashion Merchandising 3 2 0 4

This course is designed to acquaint the student with fashion and style. characteristics of style, trends, coordination of color, and design analysis. Prerequisite: None.

BUS 263 Retailing I 3 0 0 3

This course is a study of the role of retailing in our distribution system. Topics of instruction include the development of present retail practices, functions performed, principles governing effective operation, and managerial problems resulting from current economic and social trends. Prerequisite: None.

BUS 264 Retailing II 3 0 0 3

A continuation of BUS 263, Retailing I. Prerequisite: BUS 263.

BUS 269 Auditing 2 0 3 3

Auditing is a study of the theory and practices of auditing, including professional standards and rules of conduct. The student will learn the specific techniques of auditing various balance sheet accounts and comparative analysis using rapid calculation procedures. Study will also include detailed audits, internal auditing, and internal control as well as current trends in statement preparation. Prerequisite: BUS 222.

BUS 272 Principles of Supervision **3 0 0 3**

This course is a study of the basic responsibilities of the supervisor and his relationship to supervisors, subordinates, and associates. The methods of supervision and problem-solving techniques are presented through the case study method. Prerequisite: None.

BUS 280 Business Applications for the Microcomputer **2 0 3 3**

This course is designed for any student interested in learning to use business software packages on the microcomputer. The course includes some basic instructions on using the microcomputer and peripheral equipment. The course is designed to accommodate a variety of business applications and give the student actual experiences in using software packages and evaluating their usefulness in a business environment. Software programs that may be studied include electronic spreadsheets, data-base programs, accounting and tax packages, and word processors. Prerequisites: EDP 103, BUS 121.

BUS 281 Microcomputer Accounting Applications: Accounts Receivable/Accounts Payable **3 0 0 3**

This course is designed for any student interested in learning to use accounting software packages on the microcomputer. The course will emphasize the fundamentals in setting up a microcomputer accounting system, with particular emphasis on using an accounts receivable and accounts payable. Prerequisite: EDP 103, BUS 120.

BUS 282 Microcomputer Accounting Applications: Payroll/Inventory **3 0 0 3**

This course is designed for any student interested in learning to use accounting software packages on the microcomputer. The course will emphasize the fundamentals in setting up a microcomputer accounting system, with particular emphasis on using payroll and inventory programs. Prerequisite: EDP 103, BUS 120.

BUS 292 Appraisal I **3 0 0 3**

This course is a study of the principles and theory of appraising real property. Topics studied include site evaluations, building materials and components, methods of appraising property, professional organizations, and developing and operating an appraisal business. Prerequisite: None.

BUS 293 Appraisal II **3 2 0 4**

This course is a study of the methods and techniques used in estimating the value of residential properties. Topics include analysis of economic factors affecting the value of real estate; local, state, federal, and neighborhood influences; and attitudes and estimation of value. Prerequisite: BUS 292.

BUS 294 Appraisal III **3 2 0 4**

This course is a study of the capitalization of income and the income approach to value. Topics covered include an analysis of steps to estimate the value of income-producing properties such as apartments, hotels, motels, office buildings, retail stores, and industrial buildings. Other areas of study include recapture rates, capitalization rates, and appraisal of lease interests. Prerequisite: BUS 293.

BUS 296 Property Management 3 0 0 3

This course is a study of the nature of property management, the types of property, lease preparation, protection of property, and property maintenance. Other topics include fair housing, tenant selection, advertising, ethics, budgeting, and associations with people. Prerequisite: None.

BUS 1103 Small Business Operations 3 0 0 3

This course is an introduction to business operation. Areas of instruction include basic business law, business forms and records, financial problems, ordering and inventory control, layout of equipment and offices, and employer-employee relations. Prerequisite: None.

BUS 1122 Typing I 2 0 3 3

This course is an introduction to the touch typewriting system with emphasis on correct techniques, mastery of the keyboard, simple business correspondence, tabulation, and manuscripts. Prerequisite: None.

CAR 1101 Carpentry I 5 0 15 10

The course provides instruction in the principles and practices of frame construction beginning with the foundation sills and including floor joists, subfloors, wall studs, ceiling joists, rafters, bridging, bracing; sheathing, and interior wall partitions. The layout and construction methods of common types of roofs using standard rafter construction, truss construction, post and beam construction, and the application and selection of sheathing and roofing are covered. Consideration is given to the coordination of carpentry work with installation of mechanical equipment such as electrical, air conditioning, heating, and plumbing. Prerequisite: None.

CAR 1102 Carpentry II 5 0 15 10

This course is a continuation of CAR 1101. Prerequisite: CAR 1101.

CAR 1103 Carpentry III 5 0 15 10

This course covers the layout and installation of various types of wood or composition paneling, the layout and installation of cornices, and exterior trim on houses. Also, the installation of windows and doors in rough openings and the installation of hardware is covered. Prerequisite: CAR 1102.

CAR 1105 Carpentry IV 5 0 15 10

Exterior and interior trim and the finish carpentry to complete the general carpentry program are covered as well as materials and methods used in finish carpentry such as exterior cornices, door and window trim, interior flooring, door and window facings, moldings, and cornice construction. Also included are the installation of hardware, construction and installation of built-in equipment and cabinets, and millwork as performed by the general carpenter for building construction. Prerequisite: CAR 1103.

CAR 1114 Building Codes 3 0 0 3

This course covers a study of applicable sections of city, state, and national codes. The course material is correlated with all other carpentry courses. Prerequisite: CAR 1102.

CAR 1115 Estimating for Residential Construction 2 0 0 2

This is a practical course in quantity "take off" from prints of jobs performed by carpenter. Figuring the quantities of materials needed and costs of building various components and structures will be covered. Co-requisite: CAR 1105.

CET 120 Introduction to Programing I 2 0 3 3

This course is an introduction to a high level programming language used in industrial control applications. Flow charting techniques, statements, commands, and subroutines will be covered. Co-requisites: ELC 102.

CET 160 Assembly Language Programming 2 0 3 3

This course covers assembly language programming practices and procedures. A typical industrial computer instruction set is utilized while writing programs centered around industrial control, diagnostics, testing, and computer interfacing applications. Prerequisites: CET 120.

CET 200 Microprocessors 4 0 6 6

This course is an introduction to a typical industrial microprocessor. The theory of operation, architecture, memory, input/output, bus structure, timing and instruction set will be covered. Standard industrial test equipment will be used as an analysis and troubleshooting aid. Prerequisites: ELN 219, CET 160.

CET 215 Mini-Computer Maintenance I 4 0 6 6

This course is the first in a two course sequence providing an introduction to the maintenance of a typical industrial mini-computer. The following topics will be covered: overview of computer system organization, instruction set, timing of computer systems, computer diagnostics, and troubleshooting methods. Prerequisites: CET 200.

CET 220 Microprocessor Interfacing 4 0 6 6

This course is an introduction to microprocessor interfacing. The course is designed to familiarize the student with the operation, programming, and connection of interface circuits commonly used with microprocessors. Prerequisites: CET 200, ELN 235.

CET 225 Mini-Computer Maintenance II 4 0 6 6

This course is a second course in a two course sequence covering the introduction to the maintenance of a typical industrial mini-computer. The following topics will be covered: systems level programming, timing and performance of computer systems, computer I/O, interrupt systems, direct memory access, and computer diagnostic and troubleshooting methods. Prerequisites: CET 215.

CET 232 Computer Peripherals 4 0 6 6

This course covers the operation and maintenance of the peripheral devices found on a typical industrial micro- or mini-computer. Areas covered include troubleshooting procedures, maintenance techniques, and the operational characteristics of the following common peripherals: video display terminals, printers, modems, disk storage systems, and tape storage systems. Prerequisites: CET 215.

CET 235 Diagnostics & Test Programming **2 0 3 3**

This course covers the operation and writing of diagnostic programs used to troubleshoot computers, peripherals, and associated digital equipment. The second major area concerns the writing of programs used to test electronic equipment and control programmable machines. Prerequisites: CET 215.

CET 245 Data Communications **4 0 6 6**

This course covers Data Communications practices, and procedures as used on a typical industrial mini-computer. Communication protocols including networking local areas nets, synchronous, and asynchronous will be covered. Prerequisites: CET 225, CET 235.

CHM 010 Pre-Technical Chemistry **3 2 0 0**

This is an elementary course in chemistry equivalent to a high school level of difficulty. It provides the necessary foundation in chemistry for students who enter (1) a physical science technical curriculum which requires chemistry at the beginning or (2) a technical program based on the biological sciences. Topics and laboratory experiments are planned to teach chemistry which is related to the various chemical aspects of biological science. Laboratory exercises and experiments are designed to teach the fundamentals of chemistry and develop chemical laboratory skills. Prerequisite: None.

CHM 101 Chemistry **4 2 0 5**

This course is a study of the physical and chemical properties of substances, chemical changes, elements, compounds, gases, chemical combinations, weights and measurements, and theory of metals, acids, bases, salts, solvents,solutions, and emulsions. In addition, it includes the study of carbohydrates, electrochemistry, electrolytes, and electrolysis. Industrial and agricultural applications are emphasized. Prerequisite: None.

CHM 103 Chemistry—General and Inorganic **3 2 0 4**

Students will be introduced in lecture to important chemical principles fundamental to the understanding of life processes. This will include a foundation in general and organic chemistry followed by the essential features of organic chemistry, which lays the groundwork for the study of the biochemistry of living systems. Students are afforded the opportunity to expand their knowledge through classroom discussion and through laboratory work. The laboratory experiments are designed in some cases to introduce specific principles and in other cases to supplement and reinforce material introduced in lecture. Prerequisite: None.

CHM 104 Organic and Biochemistry **3 2 0 4**

This course is to familiarize the student with the nomenclature, variety, usefulness, and most significant topics in organic and biochemistry. Prerequisite: CHM 103.

CIV 105 Architectural Materials and Methods **3 0 0 3**

This course emphasizes materials used in the construction of architectural structures. Field trips to construction sites and study of manufacturer's specifications for materials, properties, standard sizes of structural materials, and construction techniques are included. Prerequisite: None.

CIV 218 Plain Concrete 3 0 0 3

This course is a study of the composition and properties of concrete, including cementing agents, aggregates, admixtures, and air entrainment; design and proportioning of concrete mixes to obtain predetermined strengths and properties; methods of placing and curing concrete; and standard control tests of concrete. Prerequisite: None.

CJC 101 Introduction to Criminal Justice 5 0 0 5

This is a general course designed to familiarize the student with a philosophy and history of the criminal justice system, including its legal limitations in a democratic republic, a survey of the primary duties and responsibilities of various criminal justice agencies, a delineation of the basic processes of justice, and an orientation relative to criminal justice as a vocation. Prerequisite: None.

CJC 102 Criminology 5 0 0 5

This is a general course designed to introduce the students to the social origins of criminal law, the administration of criminal justice, the causes of criminal behavior, and the prevention and control of crime, including the individual rehabilitation and modification of the social environment. Prerequisite: None.

CJC 103 Government-National 5 0 0 5

Topics covered in this course include English and colonial background, the Articles of Confederation and the framing of the federal constitution, the nature of the federal union, states' rights, federal powers, political parties, and the general organization and functioning of the national government. Prerequisite‘ None.

CJC 104 Government-State and Local 5 0 0 5

This course is a study of state and local government, including state-federal relationships, the functions and prerogatives of the branches, problems of administration, legal procedures, law enforcement, police power, taxation, revenues, and appropriations. Special attention will be given to North Carolina's government. Prerequisite: None.

CJC 110 Crime and Delinquency 5 0 0 5

This course is primarily concerned with scientific efforts to undestand crime and to understand man in relation to crime phenomena. It deals with those definitions and formulations of crime and criminals upon which an adaptation system of criminology must be based. It examines the law as the basic framework within which social deviations of a peculiar character assume their functions as criminal acts and those broad principles upon which a science of criminology must rest. Prerequisite: None.

CJC 115 Criminal Law I 5 0 0 5

This course is designed to present a basic concept of criminal law and to create appreciation of the rules under which one lives in our system of government. Prerequisite: None.

CJC 116 Criminal Law II 5 0 0 5

This is a continuation of the study of the basic concepts of criminal law and why the law operates in its individual ways, jurisdiction, the criminal act, the mental element, and criminal responsibility. The study proceeds to detailed examinations of the numerous specific criminal areas. Prerequisite: CJC 115.

CJC 117 Constitutional Law **3 0 0 3**

This course is a study of the Bill of Rights, as applied to the criminal justice process; the right to counsel; compulsory self-incrimination; the principles of search and seizure; the elements of a fair trial; interpretation of the First Amendment; double jeopardy; and the principle of equal protection of law. Prerequisite: None.

CJC 120 Administration of Justice **4 0 0 4**

This course is a review of court systems; procedures from incident to final disposition; the six primary functional areas for the administration of justice to include police, prosecutor, criminal courts, probation, institutions, and parole; and principles of federal, state, and civil laws as they apply to and affect law enforcement. Prerequisite: None.

CJC 121 Criminal Justice-Seminar and Practicum **5 0 10 6**

This is a general course designed to provide the student with an opportunity to pursue, under supervision, work experience in the field of criminal justice, thus providing him motivation and a sense of realism in his field of study. The three-hour seminar each week is devoted to review and discussion of field experiences. Prerequisite: Recommendation of the department chairperson.

CJC 210 Criminalistics I **3 2 0 4**

This course introduces the student to the scientific tools (resources) that are used in the study of criminal activity. Principles of biology, chemistry, and physics provide the basis for readings, lectures, demonstrations, and experiments to acquaint the student with the processes involved and the significance of the findings in conducting investigations and in the collection and preservation of evidence. Emphasis is placed upon specific types of offenses such as arson, illegal drugs, sex crimes, larceny, burglary, and homicide. Prerequisite: None.

CJC 211 Criminalistics II **3 2 0 4**

This course is a continuation of the study of criminal investigation, including a general survey of the methods and techniques used in modern scientific investigations of crime, with emphasis upon the practical use of these methods by students. Laboratory techniques will be demonstrated, and the student will participate in actual use of the scientific equipment. Prerequisite: CJC 210.

CJC 213 Criminal Evidence **3 0 0 3**

This course introduces the student to the rules of evidence and their exclusions and exceptions, procedures for the introduction of evidence and the examination of witnesses, and the doctrine on offers of proof and motions to suppress evidence. Concentration is on types and uses of evidence important to criminal justice professionals in the investigation of crimes and the prosecution of those accused of crimes. Prerequisite: None.

CJC 220 Criminal Justice Organization and Administration **5 0 0 5**

This course covers the principles of organization and administration of criminal justice agencies. It includes determination of departmental objectives, policies and procedures for recruiting, selecting and training new personnel and development of organizational charts. Prerequisite: None.

CJC 260 Ethics in Criminal Justice **3 0 0 3**

Public service professionals are constantly faced with ethical/moral decisions. With increased technology and shifting mores resulting in added pressures and fewer absolutes, those decisions have become at times exceedingly difficult to make. Yet they must be made and made logically. This course studies various ethical questions related to the types of decisions—professional and personal—that public service professionals face. To help them arrive at valid decisions, it also reviews basic ethical thought through the ages and concentrates on logical analyses of such problems. Prerequisite: None.

DFT 101 Technical Drafting I **2 0 6 4**

The field of drafting is introduced as the student studies the basic principles of the graphic language. Skills are developed in freehand lettering, geometric figure construction, orthographic and pictorial freehand, and instrument drawing of the principle views of objects as they are represented in the graphic language. Principles of size description are also introduced. Prerequisite: None.

DFT 102 Technical Drafting II **2 0 6 4**

This course includes the application of orthographic projection principles to the more complex drafting problems, primary and secondary auxiliary views, and the introduction to sections and conventions. Dimensioning practices for details and working drawings as approved by the American Standards Association are covered. Prerequisite: DFT 101.

DFT 103 Technical Drafting III **2 0 6 4**

This course is a study of the various techniques employed to produce and render isometric and oblique drawings and isometric, dimetric, and trimetric projections. An introduction to screw threads and various fasteners is included. Prerequisite: DFT 102.

DFT 112 Drafting—Electromechanical **3 2 0 4**

This course is designed to give the Electromechanical Technology student an introduction to drafting techniques and blueprint reading. The preparation of properly dimensioned rough drawings and sketches will be emphasized. Prerequisite: None.

DFT 113 Blueprint Interpretation — Mechanical **3 0 0 3**

This course is a study of graphical methods and techniques used in expressing, interpreting, and communicating engineering ideas. Prerequisite: None.

DFT 114 Electronic Blueprint Interpretation **2 2 0 3**

This course will provide experience in the various types of drawings used by the electronic industry. Chassis layouts, block diagrams, schematic diagrams, wiring diagrams, printed circuit board diagrams, and related mechanical drawings will be included. Prerequisites: None

DFT 151 Computer Graphics **2 0 0 2**

This is a course designed to provide fundamental knowledge of the principles of computer graphics. Basic skill and techniques of basic programming with respect to graphic application being taught are also covered. Corequisite: DFT 101 or ARC 106.

DFT 204 Descriptive Geometry **2 0 3 3**

This course covers a graphic analysis of space problems involving points, lines, planes, connectors, and a combination of these. Practical design problems are stressed with analytical verification where applicable. Visualization is stressed on every problem. Prerequisite: DFT 101.

DFT 205 Design Drafting I **2 0 6 4**

This course is an introduction to inking, welding symbols and methods of representing and specifying them, and basic design in the study of motion and transfer mechanisms as they relate to power trains. The principles of design sketching, design drawing, layout drafting, detailing from layouts, production drawings, simplified drafting practices, and the types and methods of specifying materials and workmanship are integral parts of the course. Prerequisite: DFT 102.

DFT 206 Design Drafting II **2 0 6 4**

This course is an introduction to piping drawings and research to solve a problem in design by consulting various manuals, periodicals, and laboratory experiments. A written technical report, preliminary design sketches, layout drawings, detail drawings, assembly, and subassembly drawings and specifications are required as a part of the program. Prerequisites: DFT 205 and DFT 260.

DFT 211 Mechanisms **3 0 3 4**

This course includes mathematical and drafting room solutions of problems involving the principles of machine elements; a study of motions of linkages, velocities, and acceleration of points within a link mechanism; and layout methods for designing cams, belts, pulleys, gears, and gear trains. Prerequisites: DFT 206, MAT 103, and MEC 104.

DFT 212 Jig and Fixture Design **2 0 6 4**

This course covers commercial standards, principles, practices, and tools of jig and fixture design. Individual project and design work to acquaint students with the types of jigs and fixtures and their design is also included in the course. Prerequisites: DFT 211 and DFT 223.

DFT 223 Design Drafting III **2 0 6 4**

This course covers the fundamentals of punch and die design, commercial standards and principles of blanking, piercing, bending, and forming dies, including compound and progressive dies. The electromechanical drawings of printed circuits, wiring diagrams, and schematics are also included. Prerequisite: DFT 206.

DFT 224 Product Design **1 0 3 2**

This course brings together the original idea, scientific theory involved, applicable product history, limiting manufacturing boundaries, aesthetic importance, and marketability considered with study given to relative importance and intended design goal. Prerequisites: DFT 211 and DFT 223.

DFT 225 Computer Graphics Design 1 0 3 2

This is a course in advanced computer graphic applications with an emphasis placed on project design. The student will have the opportunity to program, plot, store information, and use current data bases. Two-dimensional and three-dimensional graphic applications will be used to produce a finished engineering drawing. Prerequisites: DFT 211, DFT 223 and DFT 151.

DFT 260 Dimensioning and Tolerancing 1 0 3 2

The course covers Standard Drafting Practices per USASIY 14.5. It includes general dimensioning, general applications of tolerance and limits, tolerance of position and form, and advantages of true position tolerancing. Prerequisite: DFT 103.

DFT 1101 Schematics and Diagrams 0 0 3 1

This course develops the student's ability to read and interpret blueprints, charts, and instruction and service manuals. Also included in the course is information on the basic principles of lines, views, dimensioning procedures, and notes. Prerequisite: None.

DFT 1104 Mechanical Drawing I 1 0 3 2

This course covers the interpretation and reading of blueprints and information on the basic principles of the blueprint, lines, views, dimensioning procedures, and notes. Prerequisite: None.

DFT 1105 Mechanical Drawing II 1 0 3 2

This course includes further practice in interpretation of blueprints as they are used in industry, study of prints supplied by industry, making plans of operations, introduction to drafting room procedures, and sketching as a means of passing on ideas, information, and processes. Prerequisite: DFT 1104.

DFT 1106 Mechanical Drawing III 1 0 3 2

This course provides advanced blueprint reading and sketching as related to detail and assembly drawings used in machine shops and the interpretation of drawings of complex parts and mechanisms for featues of fabrication, construction, and assembly. Prerequisite: DFT 1105.

DFT 1107 Blueprint Reading 1 0 3 2

This course includes interpretation and reading blueprints applicable to air conditioning, heating, and refrigeration. The development of an ability to read and interpret floor plans, elevations, sections, and details found on pictorial, perspective, isometric, oblique, and three-view drawings is covered. Prerequisite: None.

DFT 1110 Blueprint Reading I 0 0 3 1

This course covers the principles of interpreting blueprints and trade specifications common to the building trades. The development of proficiency in making three-view and pictorial sketches is included. Prerequisite: None.

DFT 1111 Blueprint Reading II 0 0 3 1

This course covers the principles of interpreting blueprints and specifications common to the building trades. Practice in reading details for grades, foundations, floor plans, elevations, walls, doors, windows and roofs of buildings, and the development of proficiency in making three-view and pictorial sketches, and estimating from blueprints are covered. Prerequisite: None.

DFT 1112 Drafting I: Plumbing **1 0 3 2**

This course includes a review of blueprint reading; instruction in the selection, use, and care of basic drafting instruments; single-stroke freehand lettering; orthographic projection consisting of instruments and freehand sketching; and a study of dimensioning and note practices with reference to the American Standard Association practices. The methods of reproducing drawings; detail assembly, layout and pictorial drawings; and specifications, parts list, and bill of materials are covered. The drawings of piping include metal pipe, tubing, plastic pipe, pipe joints, tube joints, pipe fittings, and valves; specification of fittings, pipe threads, and specification of threads; scale layout (two-line drawing) and diagrammatic (single-line drawing), (diagrammatic methods include orthographic, developed, and pictorial); standard symbols; dimensioning of a pipe drawing, and pipe hangers and support. The student's work includes various problems of piping layout to scale. (Note: School will furnish drafting equipment.) Prerequisite: DFT 1110

DFT 1113 Blueprint Reading: Electrical **0 0 3 1**

This course covers the interpretation of schematics, diagrams, and blueprints applicable to electrical installation with emphasis on electrical plans for domestic and commercial installations using appropriate symbols and notes according to the applicable codes. Prerequisite: None.

DFT 1117 Blueprint Reading: Welding **0 0 3 1**

This course is a study of mechanical blueprints and sketches in which welding procedures are indicated. Interpretation, use, and application of welding symbols, abbreviations, and specifications are emphasized. Prerequisite: DFT 1104.

DSL 1101 Diesel Engines **4 0 15 9**

This course provides the development of a general understanding of the basic principles involved in the construction and operation of diesel engines as well as the thermodynamic concept of cycles related to the diesel engines. An elementary study of performance charcteristics of diesel engines and basic design in fuel systems is covered. Student work includes such overhaul jobs as grinding valves, gaging cylinder wear, removing and replacing cylinder liners, boring cylinders, replacing and adjusting bearings, and gaging and installing piston rins. Prerequisite: None.

DSL 1102 Diesel Electrical Systems **5 0 15 10**

This course is designed to familiarize the student with the construction and operational features of the electrical units which are used on preheating, starting, and generating systems of diesel engines. There are also student activities in reconditioning techniques of generators, starters, and alternators. Use of test equipment for measurement, adjustment, and troubleshooting is included. Prerequisite: None.

DSL 1103 Diesel Fuel Injection **2 0 6 4**

This course covers the theory related to a study of the variations in design and the principles of operation of fuel injection systems used on the automotive diesel engine. The practice work is designed to familiarize the student with the operation, maintenance, and testing of the units which comprise the fuel injection systems of diesel engineers, and teach the student to maintain, repair, and test such units as fuel pumps, transfer pumps, spray nozzles, and unit injectors. Prerequisite: None.

DSL 1104 Power Trains, Chassis, and Suspension Systems **4 0 15 9**

Instruction is given in the construction features and operating principles of truck chassis, suspension, steering, and brake systems. The student is taught to operate equipment and to correct and adjust abnormalities in suspension and steering. Familiarization with the variations in design and functioning of brake systems as used by heavy trucks and the study of the construction and operation of such component parts as clutches, transmissions, propeller shafts, and rear axles are covered. Prerequisite: None.

DSL 1105 Diesel Servicing **5 0 15 10**

This course is intended for those who desire to become proficient in the field of diesel diagnosis and repair. Vehicles are first given a complete checkout to determine the trouble, and the trouble is corrected on the basis of the diagnostic report. Training is provided on all major mechanical and electrical units. Preventive maintenance and servicing techniques are taught as recommended by manufacturers. Prerequisite: None.

ECO 102 Economics I **3 0 0 3**

Economics I is a study of macroeconomics, which treats the economy as a whole. It is a study of Gross National Product, full employment, business fluctuations, economic growth, and the expansion of bank credit. Prerequisite: None.

ECO 104 Economics II **3 0 0 3**

This course is a further study into the function of the United States economy as well as a look into world economics. Areas of study include prices, competition, nonprice competition, and income distribution in the United States. The course also includes a study of international trade and payments, economic development, and comparative economic systems. Prerequisite: ECO 102.

ECO 108 Consumer Economics **3 0 0 3**

Consumer economics is designed to help the student use his/her resources of time, energy, and money to get the most out of life. It gives the student an opportunity to build useful skills in buying, managing finances, increasing resources, and better understanding the economy. Prerequisite: None.

EDP 100 Introduction to Data Processing **3 2 0 4**

This course is an introductory course for students in the data processing curriculum. It is a technical study of the history, terminology, equipment, and concepts of data processing. Laboratory exercises will be used to familiarize the student with data processing equipment and hypothetical programming languages. Prerequisite: None.

EDP 101 Principles of Business Data Processing **3 2 0 4**

This is an introductory course designed to acquaint the student with the field of data processing. It includes a historical review of data processing, basic terminology, and fundamental concepts of data processing and programming. Laboratory exercises are devoted to familiarizing the student with basic data processing equipment. Prerequisite: None.

EDP 102 Microcomputer Concepts 3 0 0 3

This course is designed to introduce the novice student to the fundamental concepts associated with microcomputing. Terminology, hardware setup and operations, troubleshooting, elementary programming concepts, and the microcomputing environment are the concepts focused upon. An introduction to applying microcomputers to various uses and introduction to the literature is also provided. Prerequisite: None.

EDP 103 Introduction to Microcomputing DOS 3 0 0 3

This course is designed for the student without previous microcomputer experience. Operational concepts, and DOS terminology and commands within a specific microcomputer system are studied. The primary focus and goal is student proficiency with DOS operations. Hands-on involvement constitutes a signifcant portion of the student's experience. Prerequisite: None.

EDP 104 Personal Word Processing 3 0 0 3

This course is designed to provide the student with knowledge of fundamental word processing concepts and the skills to operate a specific word processing package for personal use within a business or home environment. Corequisite: BUS 100 or BUS 102, and EDP 103.

EDP 105 Assembly Language Programming I 5 2 0 6

This course is an introduction to the study of assembly language programming. It includes assembly language specifications, operations, and rules for writing source programs. The laboratory exercises are devoted to developing program logic and writing assembly language programs to solve sample problems. Prerequisites: EDP 100 and EDP 107 and MAT 117.

EDP 106 Assembly Language Programming II 4 2 0 5

This course is a continuation of the study of EDP 105 Assembly Language Programming I. it covers the more complex features of the language and more advanced programming techniques. The laboratory assignments are devoted to developing program logic and writing assembly language programs to solve sample programs. Prerequisite: EDP 105.

EDP 107 Logic and Decision Making I 3 0 0 3

This course is an introduction to the concepts of providing logical solutions to the most common types of data processing programming problems. Prerequisites: None.

EDP 108 Logic and Decision Making II 3 0 0 3

This is the second course in concepts of logical development for computer programs. More advanced concepts are covered in this course. Prerequisites: EDP 100 and EDP 107.

EDP 110 COBOL Programming I 3 2 0 4

This course is an introductory course in compiler language programming utilizing COBOL. It includes COBOL concept, components, structure, and basic instructions. The laboratory assignments stress development of program logic and writing COBOL programs to solve sample problems. Prerequisites: EDP 100, EDP 108, and MAT 117.

EDP 111 COBOL Programming II 4 2 0 5

This course is a continuation of the study of COBOL. It includes more complex COBOL instructions and techniques. The laboratory exercises stress developing program logic and writing programs to solve simulated industrial and business problems. Prerequisite: EDP 110.

EDP 112 COBOL Programming III 4 2 0 5

This course is a continuation of the study of COBOL emphasizing the more complex features of the language, efficient programming techniques, and debugging techniques. The laboratory exercises stress developing program logic and writing programs to solve simulated business and industrial problems. Prerequisite: EDP 111.

EDP 120 Introduction to Computer Programming 3 2 0 4

This course is a nontechnical introduction to the COBOL programming language. Instruction includes how COBOL is used in business to automate business procedures. The laboratory exercises will be used to develop COBOL programs that can solve business problems. Prerequisite: EDP 101.

EDP 125 Business Word Processing 3 0 0 3

This course is designed to provide the business student with basic terminology, concepts, and operational skills needed to cope with virtually any word processing program within their working environment. Corequisite: BUS 100 or BUS 102, and EDP 103, or permission of instructor.

EDP 140 BASIC Language Programming I 3 0 0 3

This is a course designed to acquaint the student with the BASIC programming language. The course is designed for the student having *no* background in microcomputer operation. Laboratory exercises are used to provide experience in solving business data processing problems. Prerequisite: None.

EDP 141 BASIC Language Programming II 3 2 0 4

This course will involve writing BASIC programs using structured programming techniques, manipulation of sequential and random data files, sorting and searching of data, and arrays and the use of graphics in a business environment. Prerequisite: EDP 140.

EDP 142 Introduction to C Language 3 0 0 3

This is an introductory course in C Language. Laboratory exercises are used to provide experience in solving business data processing problems using C Language. C programs may be executed on a microcomputer running MS-DOS/PC-DOS or the UNIX operating system. Prerequisite: EDP 151.

EDP 145 Introduction to the UNIX Operating System 3 0 0 3

This is an introductory course in using and understanding the UNIX operating system. Laboratory exercises are used to provide experience in solving data processing problems. Prerequisite: None.

EDP 150 Data Base Management Systems 3 0 0 3

This course is designed to provide an operational knowledge of fundamental concepts and terminology associated with data base management systems. Structural design, data input and retrieval, indexing, sorting, calculation, and report generation are studied within the environment of a specific data base management system. Prerequisite: EDP 103 or permission of instructor.

EDP 151 Intermediate DOS Operations **3 0 0 3**

This course is designed to provide a more in-depth study of the Disk Operating System in association with program execution and interface. Focus on specialized topics as well as a comprehensive approach is taken. Prerequisite: EDP 102 and EDP 103 or permission of instructor.

EDP 152 Financial Spreadsheet Operations **3 0 0 3**

This course is designed to provide the student with knowledge of fundamental spreadsheet operations and the skills to operate a specific financial spreadsheet package. Template design and "what if" analysis are primary conceptual and operational focuses. Prerequisites: EDP 103 or permission of instructor.

EDP 154 Microcomputer Data Communications **3 0 0 3**

This course is designed to familiarize the student with the capabilities and operations of a wide area communications system and a local networking system. Types of hardware, systems, and transmission, as well as utilities and services are studied. Prerequisites: EDP 103 or permission of instructor.

EDP 156 Microcomputer Graphics **3 0 0 3**

This course is designed to familiarize the student with the fundamental concepts and operations of a microcomputing graphics package. Representational of concepts studied are animation, pie charts, bar charts, line charts, and graphics report generation. Linkage within a presentation format is a primary focus. Prerequisite: EDP 103 or permission of instructor.

EDP 158 System Architecture **3 0 0 3**

This course is a study of the architectural design of a specific microcomputer disk operating system, ROM, and the relationship to software design. Introduction to macro assembler use and assembly language is a primary focus. Prerequisite: EDP 151 or permission of instructor.

EDP 160 Seminar in Microcomputers **3 0 0 3**

This course is specifically designed to meet the needs of students by providing current knowledge of the microcomputing discipline which is a rapidly changing and advancing field of study. Individual seminar format will be appropriate to the topic addressed and student needs. Examples of seminar format may be individual research of current literature presented in the traditional seminar format or be of the nature of updating within a specialized field of software. Prerequisite: EDP 103 and EDP 156 or permission of instructor.

EDP 162 Integrated Software **3 0 0 3**

This course is a study of an integrated software package. Specific operational skills gained is dependent upon the integrated package studied but the focus is upon the skills needed to become functional within the context of integration. Major features of integrated software are data base management, financial analysis, data communications, report generation and graphics capabilities. Prerequisite: EDP 152 or permission of instructor.

EDP 201 Computer Systems **3 2 0 4**

This is a study of computer systems involving such topics as job scheduling, file devices, file organization, operating systems, job control language, and multiprogramming. Prerequisites: EDP 105 and EDP 110.

EDP 205 Systems Design and Analysis **3 2 0 4**

This course is designed to give the student training in systems design and analysis. Instruction in the classroom and the laboratory will be on problem definition, file organization, effective retrieval and manipulation of information, and systems design techniques. Prerequisite: EDP 111.

EDP 208 Advanced Programming **3 2 0 4**

This course is designed to acquaint students with complex programming activities and refined programming techniques. The major language to be used is that of COBOL since most business data processing installations utilize this language for most program development. Concepts included in the Computer Systems and the Systems Analysis courses will be further developed. Prerequisites: EDP 112, EDP 201, and EDP 205.

EDP 220 Research Project **1 8 0 5**

This course is designed to give the student an opportunity to initiate and carry out a carefully selected project. The student is given the responsibility to solve a significant problem with a minimum of assistance from the instructors. Prerequisite: EDP 208.

EDP 230 Introduction to FORTRAN **3 2 0 4**

This course is an introduction to FORTRAN, a problem-oriented language. The laboratory exercises are devoted to the developing of program logic and writing programs using FORTRAN. Prerequisites: EDP 100, EDP 108 and MAT 117.

EDP 240 PL/1 Programming I **3 2 0 4**

This course is an introduction to PL/1 programming. It includes basic PL/1 concepts, components structure, and instructions. The laboratory assignments are devoted to developing program logic and writing programs using PL/1. Prerequisites: EDP 100 and EDP 108.

EDP 245 UNIX/C Language **3 2 0 4**

This is a general course in using the UNIX operating system and an introduction to the C programming language. Laboratory exercises are used to provide experience in solving data processing problems using UNIX and the C programming language. Prerequisites: EDP 100 and EDP 108.

DEDP 250 Data Base Management Systems II **3 0 0 3**

This course is the study of the internal and external design of menu driven data base management systems. Incorporation of design concepts are utilized within command modules via a project approach. The primary focus is upon a specific data base management system. Prerequisite: EDP 150 or permission of instructor.

EDP 260 EDP Microcomputing 3 2 0 4

This course offers a very intense study of the most advanced concepts in microcomputing. Research, experimentation, and lab assignments are included in the development of concepts. Prerequisites: EDP 208.

EDP 262 Software and Data Interface 3 0 0 3

This course is the study of techniques for the integration of data among different software packages. Macro, command modules, and batch processing are primary focuses. Labs, as well as a project approach, are taken. Prerequisites: EDP 162 and EDP 250, or permission of instructor.

EDP 270 RPG II Programming 3 2 0 4

This is an introductory course in RPG II programming. Laboratory exercises are used to provide experience in producing reports and processing files using RPG II. Prerequisite: EDP 100 and EDP 108.

EDP 280 Expert/Intelligent Systems 3 0 0 3

This course involves the study of the internal and external design features of an expert system as related to artificial intelligence concepts. Study of a specific language in relationship to design concepts is the primary focus. Prerequisites: EDP 162 and EDP 250, or permission of instructor.

EDU 101 Child Growth and Development 6 0 0 6

This course is the study of the mental and physical growth of the child from birth through adolescence. Through a brief review of recent studies in child development, the student will gain knowledge of frequently used educational research methods and research terminology. Prerequisite: None.

EDU 102 Programs for Young Children 4 2 0 5

This is a comparative study of traditional, current, and innovative preschool programs. The laboratory experience provides opportunities for the students to observe and record the growth and behavior of young children. Prerequisites: EDU 101.

EDU 103 Working with Young Children 4 0 10 5

Case presentations, film observations, and group discussions are utilized to study characteristic behaviors of each level of development and to derive guidelines for promoting desirable behaviors and for coping with undesirable behaviors. Laboratory experiences will provide opportunities to develop observation skills, effective techniques, and beginning skill in adapting activities to the needs of individual children. Prerequisite: EDU 102.

EDU 104 Art for Young Children 3 0 0 3

This course is a study of the art of young children and the development of techniques of working with young children to encourage creative expression through a variety of media. Prerequisite: EDU 103.

EDU 105 Music and Creative Movement for Young Children 3 0 0 3

This course is an exploration of a wide variety of musical activities for young children with special emphasis on techniques of selecting activities appropriate to the age level and the individual needs of the children. Prerequisite: EDU 103, or permission of department chairperson.

EDU 106 Activities for Young Children: Science and Math 5 0 10 6

This is individual and group exploration of activities and materials for developing mathematics and science experiences for preschool children, which would permit the children to learn through manipulation, experimentation, and discovery. The laboratory experience provides opportunities to implement activities with children. Prerequisite: EDU 112.

EDU 107 Communicating with Young Children 3 2 0 4

This is a course designed to improve the verbal and nonverbal communication of students working with small children in the child care center. Special emphasis is on developing awareness of body language communication, listening skills and modeling of the English language for young children. Aids to the reading and telling of literature will also be taught. Each student will be given laboratory assignments for communication experiences with small children. Prerequisites: ENG 100 and EDU 101.

EDU 108 Social Studies in Early Childhood 3 0 0 3

This is a study of the social studies phenomena that are of interest to young children. Classroom experiences will be designed to teach the student to use social studies as an integral component of the overall program for young children. Prerequisite: None.

EDU 109 Physical Activities: Games for Young Children 2 2 0 3

This is an exploration of activities for promoting optimal overall physical development of young children, with special emphasis on body movements (exercise, dance, and games). The lab time is devoted to implementing games with children. Prerequisite: None.

EDU 110 Instructional Media and Resources 2 0 3 3

This course is a survey of media and appropriate learning materials for young children. It includes a study of the role of instructional media and resources in teaching and learning, and sources of free, inexpensive material. Directed practicum time is used to construct and prepare appropriate teaching aids to use with children to help conceptual development. Prerequisites: EDU 101, EDU 102, and EDU 103.

EDU 112 Language Arts in Early Childhood 3 0 0 3

This course is a comprehensive study of each facet of language arts with emphasis on techniques of designing activities and selecting materials to promote optimal overall development and to meet the specific needs of individual children. Prerequisite: None.

EDU 113 Health and Safety for Young Children 3 2 0 4

This is a study to promote understanding of factors which influence physical and emotional health of infants and young children. Emphasis will be given to preventative measures such as designing a safe and stimulating outside play area. The course will embrace first aid techniques and allow for observation of children in play situations. The influence of child care workers on health and safety and on the teaching of health habits is emphasized. Prerequisite: None.

EDU 202 Seminar Co-op in Early Childhood **5 0 10 6**

This course provides experience in a variety of child care settings to develop further skill in working with young children, in assisting with programming activities, and in adapting to the needs of individual children. Analysis of individual problems encountered in working with specific age groups will be studied. Prerequisite: EDU 106.

EDU 203 The Exceptional Child **3 2 0 4**

This is a study of children with developmental variations requiring modification in activities. Consideration is given to recognition of problems, community resources, and appropriate activities for the child with exceptional deviations in personality or physical development. Prerequisites: PSY 102, PSY 105, PSY 205, and EDU 106.

EDU 204 Parent Education **3 0 0 3**

This is a study of ways parents can be involved in the child development center, of the purpose and value of home visitation, and of techniques for reporting child progress to parents. The role of the early childhood specialist in aiding parents in guidance of the child's development is emphasized. Each student will develop a series of programs appropriate for presentation to the parents of preschool children. Prerequisite: EDU 103.

EDU 206 Special Problems **3 0 0 3**

This course is a directed study of a specialized area of early childhood appropriate to individual career interests of students. Prerequisite: EDU 202.

EDU 211 Practice Teaching **4 0 20 6**

This is a study to give the student practice in the care of the young child. This course will give the student more experiences in directing preschool activities. Students spend a major time block caring for and guiding young children. Opportunities to carry out planned units of study will be allowed the student in this quarter. Prerequisites: Successful completion of all practicums and permission of department chairperson.

EDU 230 Issues in Early Childhood: Discipline **1 0 0 1**

This course focuses on basic concepts of discipline as an educational tool for the normal child. It emphasizes the student's development of an attitude of positive interaction with children and one another in an effort to foster the growth of affirmative behaviors in young children. Prerequisite: None.

EDU 231 Issues in Early Childhood: Staff Management **1 0 0 1**

This course focuses on the role that a qualified staff plays in a child development center. It defines the staff role as creators of an atmosphere of acceptance in which children can grow and develop. It also emphasizes the relationship of the community's view of a child development center and the quality of the staff that is hired. Prerequisite: None.

EDU 232 Programming for Infants: A Guide to Very Early Childhood Education **1 0 0 1**

This course focuses on how the adult can provide good programs for children from birth to two years of age which enhance overall development and provide good physical care. Emphasis is placed on formulating and implementing individual activity plans. Prerequisite: None.

EDU 233 Issues in Early Childhood: Infant Feeding 1 0 0 1

This course focuses on how care givers must understand and provide for proper feeding of infants. Emphasis is placed on the nutrition essential for good development. Prerequisite: None.

ELC 101 Fundamentals of Electricity I 5 2 6 8

The principles of electricity including basic electric units, Ohm's Law, theorems, magnetics, inductance, capacitance, resistive, inductive, and capacitive networks, and BASIC programming are studied. Prerequisite: None.

ELC 102 Fundamentals of Electricity II 5 2 6 8

Series and parallel resonant-circuits analysis, resonant and nonresonant transformer analysis, basic diode power supply analysis, introduction to nonlinear resistive control devices, and introduction to electromechanical devices are studied. Prerequisites: ELC 101 and MAT 101.

ELC 1111 Applied Electricity II 3 0 0 3

The fundamental concepts of alternating current, including a study of capacitive and inductive effects and resulting phase angle, are covered. A study of power, current, voltage, and impedance in the AC circuit as applied to AC power machinery and control devices relating to heating and refrigeration systems are also included in the course. Prerequisite: None.

ELC 1120 Direct and Alternating Current 7 0 15 12

The course includes a study of a structure of matter and the electron theory; the relationship between voltage, current, and resistance in series, parallel, and series-parallel circuits; analysis of direct current circuits by Ohm's Law and Kirchhoff's Law; sources of direct current potentials; fundamental concepts of alternating current flow; a study of reactance, impedance, phase angle, power, and resonance; and alternating current circuit analysis. Prerequisite: None.

ELC 1121 Electrical Installation Fundamentals 7 0 15 12

This is an introduction to the field of electrical installation. Instruction will include a course overview, use of hand tools, wiring layouts, practice wiring, safety, and the National Electrical Code. Prerequisite: None.

ELC 1122 Residential Wiring I 7 0 15 12

The techniques learned in ELC 1121 Electrical Installation Fundamentals will be applied to actual wiring. Other subjects covered will include material take-off, power tools, and electrical calculations. The study of the electrical code will be continued. Prerequisite: ELC 1121.

ELC 1123 Residential Wiring II 6 0 15 11

This is a continuation of ELC 1122 Residential Wiring I. Practice wiring will be continued. Other subjects covered will include interpretation of specifications, electrical contracts, switch gear, and electrical design. The study of the electrical code will be continued. Prerequisite: ELC 1122.

ELC 1125 Commercial and Industrial Wiring 6 0 15 11

This course covers layout, planning, and installation of wiring systems in commercial and industrial complexes, with emphasis upon blueprint reading and symbols, the related National Electrical Codes, and the application of the fundamentals to practical experience in wiring, conduit preparation, and installation of simple systems. Prerequisite: ELC 1123.

ELM 200 Mechanisms **3 0 3 4**
This course is an introduction to the various simple mechanisms which are used to build up industrial machinery. Kinematic aspects as well as physical applications will be studied. Prerequisite: PHY 111.

ELM 210 Electromechanical Devices **5 0 6 7**
This course covers a wide range of electromechanical devices found in industrial equipment. The theory of operation of each will be studied and an opportunity will be provided in the lab to become familiar with their operating characteristics and limitations. The common causes of trouble will also be studied. Prerequisite: ELN 210, ELM 200.

ELM 215 Electrical Control Systems **5 0 6 7**
This course is an introduction to the study of the control of electrical equipment. It covers the conversion of mechanical parameters to electrical signals, and their use to control the electromechanical equipment which powers much of today's industrial machinery. The laboratory will give an opportunity to implement some of these systems. Prerequisite: ELN 210, ELM 200. Co-requisite: ELM 210.

ELM 220 Automatic Control Systems I **4 0 3 5**
This course serves as an introduction to the principals of automatic control of machines and processes. The concept of feed-back will be introduced at an early stage, along with the uses of transducers to provide the signals required. While the emphasis will be on electrical systems, pneumatic instrumentation will also be covered. The lab will provide familiarity with the operating characteristics of these systems. Prerequisite: ELM 210, ELM 215. Co-requisite: ELN 219.

ELM 225 Programmable Controllers **2 4 0 4**
This course is an introduction to the use of programmable controllers in industrial applications which currently employ conventional relay logic. Although a reasonable knowledge of these relay control systems is assumed, a thorough review will be provided. Sufficient laboratory time will be allowed to insure that the student attains a hands-on working knowledge of programmable controllers. Prerequisite: ELN 236 or equivalent experience.

ELM 230 Automatic Control Systems II **5 0 3 6**
This course is a continuation of Automatic Control Systems I. More advanced automatic control systems and typical industrial process control systems will be studied. Programmable controllers will be covered in depth, and familiarity with process control computers will be gained. Prerequisite: ELM 220, ELN 219, Co-requisite: ELN 225, ELM 240.

ELM 240 Electromechanical Troubleshooting **3 0 3 4**
This course will instruct the student in the development of a coherent strategy for solving maintenance problems with the electromechanical equipment he is likely to encounter in industry. In order to give hands-on experience in the lab, several systems will be provided in which known problems can be inserted. Emphasis will be placed on equipment controlled by programmable controllers, and typical

industrial systems such as motor speed controls and some process control instrumentation. Procedures will be stressed rather than specific equipment. Corequisite: ELM 230, ELN 225.

ELN 110 Transistor Applications 5 2 6 8

This course is devoted to transistor operations as a discrete control device. The content includes biasing and dynamic analysis of the common-emitter, common-collector, and common-basic configurations as they apply to amplifiers and oscillators. Some general consideration is given to the field effect transistor. Prerequisites: ELC 102 and MAT 102.

ELN 210 Linear Integrated Circuits 5 2 6 8

This course is an extensive study of linear integrated circuits such as differential amplifiers, operational amplifiers, regulators, timers, and phase lock loops. Emphasis is placed on OP amp applications as they apply to waveshaping, amplifiers, oscillators, and filters. Prerequisite: ELN 110.

ELN 219 Digital Fundamentals 5 0 6 7

This course is an introduction to the logic and digital circuits typically used in industrial control circuits, microprocessors and computer systems. Prerequisites: ELN 110, ELN 210.

ELN 225 Computers and Microprocessors 5 0 6 7

This course is an introduction to a typical industrial microprocessor. The theory of operation, architecture, memory, input/output, bus structure, timing and instruction set will be covered. Standard industrial test equipment will be used as an analysis and troubleshooting aid. Prerequisite: ELN 219.

ELN 235 Industrial Electronics I 5 0 6 7

This course is a study of a wide variety of transducers, such as pressure, temperature, light, and velocity as they apply to industrial control devices. Prerequisite: ELN 210.

ELN 236 Industrial Electronics II 3 0 6 5

This course is a study of electromechanical devices, including electric motors and generators, motor starters, and contractors. Also, servo systems and three-phase power distribution are covered. Prerequisite: ELN 235.

ELN 245 Electronic Design Project 2 0 6 4

The course is devoted entirely to the development, testing, and evaluation of an electronic design project using all of the skills and knowledge which the student has acquired thus far. Research and development procedures are emphasized in developing a prototype model. Prerequisites: ELN 210 and ELN 219.

ELN 247 Electronic Systems: Computers 4 0 6 6

This course consists of a functional block diagram analysis of a microcomputer system currently used in industry. Classroom activity includes flow charting and the use of the instruction set in writing programs in machine language. The lab will provide practice in manipulating the hardware and software associated with such computers. Prerequisite: ELN 219.

ELN 248 Microprocessor Interfacing 5 0 6 7

This course is an introduction to microprocessor interfacing. The course is designed to familiarize the student with interface circuits commonly used with microprocessors. A short introduction to job hunting is included. Prerequisites: ELN 110, ELN 210, ELN 219, ELN 235, ELN 236, ELN 247.

ELN 1118 Industrial Electronics 3 0 3 4

This is a general introduction to the field of electronics with special emphasis on industrial applications. This course is designed to help the nonelectronic vocational student understand the basic principles of electronics as applied in a modern industrial setting. After a review of DC and AC theory, the student will see digital electronics applied in the control of motors. In addition, the student will receive a brief introduction to process control and various transducers. Prerequisite: None.

ELN 1121 Solid State Devices and Circuits 5 0 9 8

This is a course in solid state theory and the servicing of AM and FM radio and stereo receivers. Devices to be studied include the diode, transistor, FET, Zener diode, and the VCO as circuit components. The circuits studied are multiplexing and decoders. An introduction to troubleshooting of AM, FM, and FM stereo receivers is included. Prerequisite: ELC 1120.

ELN 1122 Transistor Theory and Circuits 4 0 9 7

This is a course in semiconductor theory. Devices to be studied include the diode, transistor, FET, Zener diode, SCR, UJT, and integrated circuits. Circuits studied in lecture and laboratory sessions include power supplies, tuned amplifiers, audio amplifiers, oscillators, and detectors. An introduction to systems troubleshooting is included. Prerequisite: ELC 1120.

ELN 1123 Black and White Television Servicing 7 0 18 13

The course covers a study of black and white television receivers, a detailed study of all circuits of the TV receiver in classroom and laboratory sessions, and supervised servicing practice to develop skills in using test equipment to repair and maintain television receivers. Prerequisites: ELN 1121 and ELN 1122.

ELN 1124 Color Television Servicing 6 0 21 13

The course includes theory of operation of the television circuits peculiar to color receivers, composite color telecasting signals, color receiver detectors, kinescopes, convergence, and matrix networks. The theory of operations and practical test bench techniques, including troubleshooting, alignment, and convergence, are covered. Prerequisite: ELN 1123.

ELN 1125 Digital Fundamentals and Circuits 4 0 6 6

In this course, emphasis is placed on the principles and operation of digital circuits which are used in the communications area such as in radio, television and VCR's. Prerequisite: ELN 1124 or equivalent experience.

ENG 001 Spelling 3 0 0 0

The course in basic spelling will emphasize the relationship of symbols to their corresponding sounds. It will stress spelling rules, mnemonics, and techniques in the perceiving of sounds and retaining the memory for words as a configuration. Proofreading and dictionary use will also be emphasized. Prerequisite: None.

ENG 005 Language Development I 2 2 0 0

This is the first in a series of courses which concentrates on basic reading skills that enable a student to analyze words through phonetic word attack. Prerequisite: Recommendation by the department chairperson.

ENG 006 Language Development II 2 2 0 0

This is a continuation and specialization in language skills. Prerequisite: Recommendation by the department chairperson.

ENG 007 Language Development III 2 2 0 0

This is a continuation and specialization in language skills. Prerequisite: Recommendation by the department chairperson.

ENG 008 Language Development IV 2 2 0 0

This is a continuation and specialization in language skills. Prerequisite: Recommendation by the department chairperson.

ENG 010 Basic Writing Skills 5 0 0 0

Designed to reinforce the writing skills of those students who are not ready to attempt successfully the materials in ENG 101 Introduction to Written Communication, this course enables the student to develop competency in grammar, sentence structure, punctuation, flow of writing, and proofreading. Prerequisite: ENG 021 or ENG 001 if diagnostic tests indicate a need for these courses.

ENG 021 Basic Reading Skills and Vocabulary I 3 0 0 0

This basic reading course is structured to enable a student who is experiencing decoding difficulties to improve his word attack skills. Dictionary usage, comprehension, and vocabulary development will also be included. Prerequisite: Demonstration of minimum proficiency in word attack skills as determined by departmental test battery.

ENG 022 Basic Reading Skills and Vocabulary II 3 0 0 0

This course is designed to enable the student to develop the ability to analyze words and to increase his vocabulary. Major emphasis will be placed on developing comprehension skills to a level adequate to perform in his curriculum program. Prerequisite: Demonstration of a minimum proficiency in comprehension and word attack skills as determined by the departmental test battery or the CGP cutoff scores.

ENG 023 Basic Reading Skills III 3 0 0 0

This course is an advanced reading course that stresses speed and accuracy in reading comprehension with emphasis on attaining satisfactory performance levels on standardized tests. Additional topics to be studied include test-taking techniques, vocabulary building, and reading in the content areas. Prerequisite: Demonstration of an 11+ grade reading level based on a departmental standardized test or successful completion of ENG 022.

ENG 050 English for International Students 5 0 0 0

An introductory level course designed to prepare ESL (English-as-a-Second Language) students for more capable performance in curriculum coursework. Emphasis will be placed on the following skills: pronunciation, vocabulary, spelling, word order and sentence patterns, and fluent expression. Prerequisite: A demonstrated fourth grade reading level, based on a departmental standardized test (TABE M) and referral by the Director of Pre-Tech Studies.

ENG 100 Oral Communication **3 0 0 3**

This course provides the student the opportunity to improve his skills for public speaking, interpersonal communication, and group participation. Included are formal and informal speeches, class exercises, and conferences. Prerequisite: None.

ENG 101 Introduction to Written Communication **3 0 0 3**

This course provides a review of basic English grammar and frequent writing exercises which require the student to apply the principles of standard English usage. Assignments provide experience in combining ideas into sentences and in composing paragraphs and short essays using a variety of methods of development. Prerequisite: Passing score on screening tests or ENG 010 and ENG 111.

ENG 102 Composition **3 0 0 3**

This course will give the student training and practice in writing and thinking through work in the basic logical modes: analysis, comparison and contrast, definition, persuasion, etc. The student will study these various methods of presentation and will then apply the techniques in full-length compositions. The student will also prepare a library research paper. Prerequisite: ENG 101.

ENG 103 Technical Report Writing **3 0 0 3**

The fundamentals of English are utilized as background for the organization and techniques of modern report writing. Exercises in developing typical reports, using writing techniques and graphic devices, are completed by the student. Practical application includes the preparation of a technical report which is related to the student's chosen curriculum. Prerequisites: ENG 102 and enrolled in third quarter (minimum) of curriculum or by permission of ENG 103 instructor.

ENG 111 Grammar Skills **3 0 0 3**

This course is specifically designed to reduce the grammar and usage instruction a student needs before entering composition courses. Students reinforce their recognition skills while seeing the parts of sentences in relation to the whole. The study of the types and structure of sentences is important because students will be expected to read, write and understand these structures in their other courses. This grammar course gives students practice in putting almost any sentence into parts of speech, regardless of its length. This course coordinates students' abilities and prior grammar studies toward such an end. Sentence structure is the usual determinate of punctuation which will also be stressed through numerous drills and exercises. Prerequisite: None.

ENG 112 Introduction to Journalism **2 2 0 3**

Students will explore the genre of magazines and newspapers, various styles of writing, interviewing, layout and formatting of publications. Learning will be largely experiential: field trips, guest lecturers, simulations, and writing assignments culminating in the publications, *The Reporter* and *FTC Techtalk*. Prerequisite: A passing score on the Sentences portion of the CGP. A student without a passing score may take this course while taking ENG 010.

ENG 115 Appreciation of Literature 3 0 0 3

The student will sample the literary genres of prose and poetry drawn from varied cultures and periods. He will analyze different styles and techniques of writing used in some of the masterpieces of literature. Prerequisite: None.

ENG 116 Children's Literature 3 0 0 3

This is a survey of literature for young children. The student will gain an appreciation and awareness of a variety of types of literature to be presented to the child during the preschool years. Prerequisite: EDU 107 and EDU 112.

ENG 200 Advanced Speech 3 0 0 3

This course is designed for the student who wishes to polish his speaking skills beyond the level achieved in ENG 100 Oral Communication. The student receives instruction in the preparation and delivery of longer oral presentations and in the principles of argumentation with some practice in informal debate. Analysis of famous speeches is also included. Prerequisite: ENG 100.

ENG 205 Business Report Writing 3 0 0 3

The business report is influential in decision making, and the writing phases involved in planning, organizing, and preparing this report are the major contents of the course. Memoranda of various types and a formal report are studied. Prerequisite: ENG 102 or permission of the department chairperson.

ENG 206 Business Communications 3 0 0 3

This course develops skills in techniques in writing business communications. Emphasis is placed on writing letters of claim, adjustment, credit, collection, sales, application, and other specific types of business letters. Prerequisite: ENG 102 or permission of department chairperson.

ENG 207 Educational Report Writing 3 0 0 3

This is a written communication course stressing business letters, memos, reports, and employment interviewing. Special emphasis will be on types of communication written in child care centers, anecdotal records, school newsletters, progress letters and reports, request letters for conferences, accident reports, press releases, etc. In conjunction with the summer quarter courses (EDU 112 and EDU 110), each student will prepare a report on teacher-made materials as a project for both the English and education courses. Prerequisites: ENG 102, EDU 101, EDU 102, and EDU 103.

ENG 1101 Communications I 3 0 0 3

This is a course in communicative skills stressing reading, writing, speaking, and listening. The course includes library research, planning and delivering effective oral presentations, participation in group discussions, and practice in developing listening skills. Prerequisite: None.

ENG 1112 Communications II 3 0 0 3

This is a course in communicative skills with emphasis on written communication in business and industry. Included are units on business letters, job employment, records, forms, and reports. Prerequisite: None.

HEA 101 Personal Hygiene and Health **3 0 0 3**

This course is a study of influences on physical and mental health, individual practices which aid in maintaining good physical and mental health throughout the life span, and responsibilities of those working with young children to maintain personal health and to serve as models for health practices. Prerequisite: None.

HEA 149 General Pharmacology **3 0 0 3**

This course will provide the student with a working knowledge of pharmacological effects, side effects, contraindications, and use of drugs. Sterile preparation and the use of pharmacological measuring systems in preparing drugs will also be covered. Prerequisite: None.

HET 1101 Heating Systems **6 0 12 10**

This course includes oil burner fundamentals; operation, control, and service of oil burner systems; gas heating devices; operation, control, and service of gas burner systems; installation and service of electric heating elements and their controls; principles of operation of hot water and low pressure systems; and the installation and service of piping, controls, pumps, and coils. Prerequisite: AHR 1105.

HUM 1101 Humanities for Vocational Students **3 0 0 3**

This course is designed to help the student recognize the importance of values through cultural, economic, political and geographical considerations affecting himself and his relationships with others, both personally and professionally. Prerequisites: None.

ISC 101 Introduction to Occupational Safety and Health **4 0 0 4**

This is an introduction to the principles of occupational safety and health and the hazards faced by persons employed in industrial plants. This survey course covers record-keeping requirements, first aid, key man development, and preparation of potential management and supervisory personnel for certificates in these areas. Prerequisite: None.

ISC 201 Industrial Organization and Management **3 0 0 3**

This course is a survey of the history of modern management and the various functions which the manager of a modern industrial enterprise must perform. It includes a study of the various departments that assist the manager in carrying out his responsibilities. Prerequisite: None.

ISC 202 Quality Control **3 2 0 4**

This course is a study of the principles and techniques of quality control and cost saving; organization and procedure for efficient quality control; functions, responsibilities, structures, costs, reports, records, personnel, and vendor-customer relationships in quality control; and sampling inspections, process control, and tests for significance. Prerequisite: None.

ISC 203 Motion and Time Study **3 2 0 4**

This course includes a study of operations analysis, types of process charts, breakeven analysis, micromotion analysis, work measurement techniques, predetermined time systems (MTM), and development of standard data for incentive systems. Prerequisite: None.

ISC 209 Plant Layout 3 2 0 4

This course is a practical study of factory planning with emphasis on the most efficient arrangements of work areas to achieve lower manufacturing costs. Included are layouts for small and medium-sized plants; layout fundamentals; selection of production equipment and materials handling equipment; and the effective management of people, money, and materials in a manufacturing operation. Prerequisite: None.

MAT 001 Structure of Arithmetic 5 0 0 0

This course is designed to help the student gain and improve computational skills. Instruction is in the basic operations of arithmetic to include addition, subtraction, multiplication, division, fractions, decimals, and percentages. Prerequisite: None.

MAT 002 Pre-Business Mathematics 5 0 0 0

This course is a review and reinforcement of the basic mathematical skills used in business mathematics. Prerequisite: None.

MAT 003 Introductory Algebra 5 0 0 0

A course designed to provide the student with the basic understanding and manipulative skills of elementary algebra, with some basic applications. It includes whole numbers, fractions, signed numbers, first degree equations, exponents, polynomials, factoring, rational expressions and graphing. Prerequisite: None.

MAT 004 Intermediate Algebra 5 0 0 0

This course is designed for those students who have had some previous instruction in algebra. Basic concepts of algebra are covered. It includes the real number system, first degree equations, polynomial, factoring, rational expressions, radicals and complex numbers, quadradic equations, functions, and logarithmic function. Prerequisite: MAT 003 or equivalent.

MAT 005 Geometry 5 0 0 0

This course is designed to provide the student with the basic understanding and manipulative skills of elementary geometry. Prerequisite: None.

MAT 009 Algebra and Trigonometry 5 0 0 0

This course is for students who need a review of algebra and trigonometry. It includes basic algebra, functions, graphs, right triangles, basic identities, equations and applications. Prerequisite: MAT 004 or equivalent.

MAT 020 Mathematics for Health Education 3 0 0 0

This course is designed for the student who is preparing for a health career. Topics covered are basic operations of arithmetic, fractions, decimals, percents, ratio and proportion, metric system, apothecaries' system, and mathematics of drugs and solutions. Prerequisite: None.

MAT 101 Technical Mathematics I 5 0 0 5

This is a course in mathematics designed to support all technology courses. Topics covered are fundamental concepts and operations of algebra, functions and graphs, trigonometric functions, linear equations and determinants, factoring and fractions, quadratic equations, vectors, oblique triangles, and graphs of trigonometric functions. Prerequisite: Satisfactory score on mathematics placement test or MAT 004.

MAT 102 Technical Mathematics II **5 0 0 5**

This is a course in mathematics designed to support all technology courses. Topics covered are exponents and radicals, and j-operator, logarithms, algebraic and trigonometric equations, inequalities, variations, progressions, advanced topics in trigonometry, and equations of higher degree. Prerequisite: MAT 101.

MAT 103 Technical Mathematics III **5 0 0 5**

This is a course in mathematics designed to support all technology courses. Topics covered are the straight line, limits, geometric and algebraic interpretation of the derivative, applications of the derivative, integration, and applications of integration. Prerequisite: MAT 102.

MAT 113 Allied Health Mathematics I **3 0 0 3**

This is the first of a series of two courses designed to develop a high level of proficiency in basic mathematical and algebraic skills for the student in a health center. Topics covered are whole numbers, fractions, decimals, percents, algebraic concepts, linear equations, functions and graphs, and trigonometric functions. Prerequisite: None.

MAT 114 Allied Health Mathematics II **3 0 0 3**

This is a continuation of MAT 113 Allied Health Mathematics I. Topics covered are logarithms, ratio and proportion, metric system, apothecaries' system, mathematics of drugs and solutions, and basic statistics. Prerequisite: MAT 113.

MAT 115 Fundamental Concepts of Algebra **3 0 0 3**

This is a general review of fundamental mathematics with emphasis on algebra and algebraic applications. Topics covered are the real number system, properties of numbers, sets, functions and relations, graphing, solution of equations and inequalities, polynomials, powers and roots, and basic trigonometry. Prerequisite: High School Algebra or MAT 003.

MAT 116 Fundamentals Concepts of Statistics **5 0 0 5**

This is a course in statistics designed to support all technology courses. In scope, the course consists of frequency distribution, graphic representation, percentiles, measures of central tendency, variability, the normal distribution curve, sampling error, significance of difference between means, correlation, statistics and the design of experiment, and chi-square. Prerequisite: MAT 115.

MAT 117 EDP Mathematics **5 0 0 5**

This is a general course in algebraic concepts designed specifically to prepare data processing students for later course work. Hexadecimal-binary arithmetic, polynomial operations, fraction equations and quardatic equations are the primary topics covered. Prerequisites: None

MAT 118 General Math **3 0 0 3**

This course is an introduction to elementary school mathematics. Topics covered are the basic operations of arithmetic with fractions, solving simple equations, and an introduction to certain concepts of modern math. Prerequisite: None.

MAT 201 Technical Mathematics IV **5 0 0 5**

This is a course in mathematics designed to support the electronics technology curriculum. Topics covered are advanced concepts of a differential and integral calculus, the Maclaurin series, series expansions, and differential equations and applications. Prerequisite: MAT 103.

MAT 1101 Fundamentals of Mathematics **5 0 0 5**

This course will give the student practical number theory and analysis of the following basic operations: addition, subtraction, multiplication, division, fractions, decimals, powers and roots, percentages, ratio and proportion, plane and solid geometric figures used in industry, and measurement of surfaces and volumes. Prerequisite: None.

MAT 1102 Algebra **5 0 0 5**

This course covers the following basic concepts and operations of algebra: historical background of our base-10 number system, algebraic operations (addition, subtraction, multiplication, and division), fractions, letter representation, grouping factoring, ratio and proportion, variations, graphical and algebraic solution of first-degree equations, solution of simultaneous equations by addition and subtraction, graphing, exponents, logarithms, tables, and interpolation. Prerequisite: None.

MAT 1103 Geometry **3 0 0 3**

This course covers fundamental properties and definitions, plane and solid geometric figures, selected general theorems, and geometric construction of lines, angles, and plane figures. Also included are areas of plane figures, volume of solids, and geometric principles applied to shop operations. Prerequisite: None.

MAT 1104 Trigonometry **3 0 0 3**

This course covers trigonometric ratios, solving problems with right triangles, using tables and interpolating, solution of oblique triangles using law of sines and law of cosines, graphs of the trigonometric functions, inverse functions, trigonometric equations, and all topics are applied to practical problems. Prerequisite: MAT 1102.

MAT 1113 Carpenter's Mathematics and Estimating **5 0 0 5**

This course includes practical problems which the carpenter must frequently solve. Emphasis is placed upon any weaknesses in the basic mathematics operations with instruction and practice of the needed operation. The course will also include problems involving common fractions, decimals, power and roots, percentages, and ratio and proportion. Prerequisite: None.

MAT 1114 Carpenter's Mathematics **5 0 0 5**

This course is a continuation of MAT 1113 Carpenter's Mathematics and Estimating, including the fundamental ideas in geometry, areas, triangles, circles and volumes of geometric solids and cylinders. Prerequisite: MAT 1113 or equivalent.

MAT 1115 Elements of Mathematics I **5 0 0 5**

A course designed for Electronic Servicing to include review of arithmetic, powers of ten, exponents, fundamentals of algebra, linear equations, fractions and applications. Prerequisite: None.

MAT 1116 Elements of Mathematics II **3 0 0 3**

A course designed for Electronic Servicing to include, trigonometry, complex numbers, quadratic equations, logarithms and applications. Prerequisite: MAT 1115 or equivalent.

MAT 1117 Plumber's Arithmetic **4 0 0 4**

This course is composed primarily of practical problems which the plumber must frequently solve. It also includes emphasis on instruction and practice in areas of deficiency in basic mathematics and use of problems involving common fractions, decimals, and percentages. Prerequisite: None.

MAT 1150 Printer's Mathematics **5 0 0 5**

This course deals with the printer's point system as it applies to type spaces, furniture, and other spacing materials, as well as problems in spacing outlines and centering heads. Instruction and practice will be given in reading a micrometer. Problems in cutting paper economically, in figuring the amount, and in measuring the thickness of papers and offset plates will be used. Prerequisite: None.

MEC 101 Machine Processes I **1 0 6 3**

This is an introductory course designed to acquaint the student with basic hand tools, safety procedures, and machine processes in our modern industry. The course includes a study of measuring instruments, characteristics of metals, and cutting tools. The student will become familiar with the lathe family of the machine tools by performing selected operations such as turning, facing, threading, drilling, boring, and reaming. Prerequisite: None.

MEC 102 Machine Processes II **1 0 6 3**

This course covers advanced operations on lathe, drilling, boring, and reaming machines. The types of milling machines, cutter, jig, fixture devices, the accessories used in a modern industrial plant, and safety in the shop are also studied. Prerequisite: MEC 101.

MEC 104 Applied Mechanics **5 0 0 5**

This course covers the concepts and principles of statics, parallel, concurrent and noncurrent force systems in coplanar and noncoplanar situations, concepts of centroids and center of gravity, and moments of inertia. Prerequisites: MAT 103 and PHY 111.

MEC 165 Introduction to Basic Programming for Manufacturing Engineering Technology **1 0 3 2**

This is a fundamental course which develops the concepts of basic programming language. Corequisites: MEC 101 and MAT 101.

MEC 180 Programming for Manufacturing **3 0 3 4**

This is a course in the planning, organizing, and execution of programs to improve manufacturing processes through the use of the microcomputer. Prerequisites: MEC 165 and MEC 201.

MEC 201 Manufacturing Processes I **1 0 6 3**

The newer concepts of work handling, automatic machining processes, chipless production, new techniques in metal forming, analysis of high-energy forming, ultrasonic machining, electrolytic metal removal, chemical milling, numerical control system, and production methods in manufacturing are covered. Prerequisite: MEC 102.

MEC 202 Manufacturing Processes II 2 0 6 4

The newer concepts of work handling and automatic machining processes are emphasized. Concentrated study of production methods in manufacturing is included. Prerequisite: MEC 201.

MEC 203 Welding Processes 2 0 3 3

This is basic study of all popular welding processes, including basic gas welding, basic arc, MIG, TIG, automatic flame cutting, and process applications. Operation of each process is limited to the extent required. Prerequisite: None.

MEC 205 Strength of Materials 3 2 0 4

This course includes a study of principles and analysis of stresses which occur within machine and structure elements subjected to various types of loads such as static, impact, varying, and dynamic. An analysis of these stresses is made as applied to riveted and welded joints, beams, columns, and other components. Prerequisite: MEC 104.

MEC 206 Process Analysis and Estimating 3 4 0 5

This course focuses on the planning of operation sequences for efficient production, tool planning, and estimating. The operation of machine tools in production projects is required in laboratory exercises. Prerequisite: None.

MEC 210 Ferrous Metallurgy 3 0 3 4

This course is a beginning course in the field of metallurgy. The first quarter is concerned with the extraction, characteristics, and uses of ferrous metals. The student is given the opportunity to use basic metallurgical equipment during the laboratory part of the course. Prerequisite: PHY 112.

MEC 213 Production Planning 4 0 0 4

This course emphasizes day-to-day plant direction, forecasting, product planning, scheduling, dispatching, routing, and inventory control. Students will identify problems and develop corrective action through the study of case histories. Prerequisite: ISC 201.

MEC 230 Hydraulics and Pneumatics 3 2 0 4

This is a course to introduce the Electromechanical student to the basic principles of hydraulics and pneumatics. General applications of fluid power systems will be studied, and the use of pneumatics in instrumentation and control will be covered. Prerequisite: PHY 111, MAT 103.

MEC 235 Fluid Power 3 0 3 4

This course includes the basic theories of hydraulic and pneumatic systems; combinations of systems in various circuits; and the basic designs and functions of circuits and motors, controls, electrohydraulic servomechanisms, plumbing, filtration, accumulators, and reservoirs. Prerequisites: PHY 111 and MAT 103.

MEC 237 Control Systems 3 2 0 4

This course covers the basic principles of electrical, electronic, and pneumatic control systems as related to industrial applications. The basic design and functions of circuits, motors, transducers, and servomechanisms, and a review of the National Electrical Code are included. Prerequisite: PHY 113.

MEC 240 Introduction to Robotics 3 2 0 4

This is a fundamental course in application, programming, and maintenance of robot devices. Prerequisites: MEC 235, MEC 237, and MEC 180.

MEC 1101 Machine Shop Theory and Practice I 4 0 12 8

This course provides an introduction to the machinist trade and the potential it holds for craftsmen. It deals primarily with the identification, care, and use of basic hand tools and precision measuring instruments. Elementary layout procedures and processes on the lathe drill press, grinding (off-hand) machines, and milling machines are introduced both in theory and practice. Prerequisite: None.

MEC 1102 Machine Shop Theory and Practice II 4 0 12 8

Instruction is provided on advanced operations using layout tools and procedures, power sawing, drill press, surface grinder, milling machine, and shaper. Students will be introduced to the basic operations of the cylindrical grinder and select projects encompassing all the operations, tools, and procedures thus far used and those to be stressed through the course. Prerequisite: MEC 1101.

MEC 1103 Machine Shop Theory and Practice III 3 0 12 7

This course provides advanced work on the engine lathe; turning, boring, and threading machines; grinders; milling machine; and shaper. An introduction to basic indexing and terminology with additional processes on calculating, cutting, and measuring of spur, helical, worm gears, and wheels is provided. The use of precision tools and measuring instruments such as vernier height gages, protractors, and comparators is provided. Basic exercises are done on the turret lathe and on the tool and cutter grinder. Prerequisite: MEC 1102.

MEC 1104 Machine Shop Theory and Practice IV 3 0 12 7

Class projects using previously learned procedures in planning, blueprint reading, machine operations, final assembly, and inspection are developed. The instruction provides for additional processes on the turret lathe, tool and cutting grinder, cylindrical and surface grinder, and advanced milling machine operations. Special procedures and operations, processes and equipment, faithful observance of safety procedures, and establishment of good work habits and attitudes acceptable to the industry are stressed. Prerequisite: MEC 1103.

MEC 1105 Advanced Machining 5 0 3 6

This course provides a study of the operation of jig borers, conventional and wire EDM, visual grinders, grinding wheels, coolants, lapping, machine safety, drilling techniques, numerical control machines, boring, press brakes, boring techniques, speeds and feeds. Prerequisite: MEC 1104 or equivalent experience.

MEC 1106 Tool Design I 5 0 3 6

This course is an introduction to tool design as it relates to engineering drawings and basic tool room practices. The following items and procedures will be emphasized: fasteners, clamps, locators, dowels, drill bushings, ball bushings and rods, ball screws, stock feeds and stops, die springs, pilots, slides, jigs and fixtures, welding fixtures, die sets, multiple operating dies, brake dies, shaving dies, urethane dies, cutters, strippers, scrap cutters, plastic and die casting molds, gears, cams, die layout, heat treating and tempering, drawing, swaging, fits, tolerances and allowances, surface finishes, bend allowances, weld symbols, punch and die clearance, blanking pressures, ferrous and plastic materials, castings, forging, and tool steels. Prerequisite: MEC 1104 or equivalent experience.

MEC 1107 Tool Design II 4 4 0 6

This course is a continuation of the study of tool design with special emphasis on punches and dies, tool steels and heat-treating procedures with practical experience in the heat-treatment of commonly used tool steels. Prerequisite: MEC 1106.

MEC 1108 Advanced Measuring Instruments 2 2 0 3

This course provides a study of common and special measuring instruments. The following instruments and procedures will be covered: scales, micrometers, verniers, height gages, test indicators, dial indicators, gage pins, ring gages, thread gages, surface plates, special gages, master gages and National Bureau of Standards, supermike, torque gages, sine bar, Johnansen Gage Blocks, gage tolerances, gage calibration, gage standards and tolerances, optical comparator, optical flats, temperature co-efficient and compensation air gages, thread and gear measurement, grinding gages, angle measurement, precision squares. Prerequisite: MEC 1104 or equivalent experience.

MEC 1109 Advanced Cutter Grinding 2 0 6 4

This is an indepth study of the use of and the sharpening of various cutting tools used in the metal working trade. The study will include: center drills, counter bores, counter sinks, drills, taps, reamers, end mills, saws, step-drills, single point lathe tools, carbide tools, shell mills, roughing mills, dovetail cutters, keyway cutters, boring tools, inverted tooth cutters, burrs, dies, broaches, slab mills, cutter materials, metal cutting and chip theory, cutter grinding machines and safety, material consideration, chip breakers, cutting edge angles, relief angles, pilots, grinding wheel types and selection, grinding dust control and health, and operating safety. Prerequisite: MEC 110 or equivalent experience.

MEC 1112 Machine Shop Processes 1 0 3 2

This course acquaints the student with the procedures of layout work and the correct use of hand and machine tools. Experiences in the fundamentals of drill press and lathe operations, hand grinding of drill bits and lathe tools, and set-up work applied to the trade are provided. Prerequisite: None.

MEC 1113 CNC Lathe Operation 1 0 3 2

This course is an introduction to CNC machining and the operation of the CNC Lathe. A study of "G" codes, program writing, loading programs into the machine, editing programs, and the running of programs on the CNC Lathe are also included. Prerequisite: MEC 1102 or equivalent machine shop experience. Corequisite: MEC 1103 or equivalent machine shop experience.

MEC 1114 CNC Milling Machine Operation 1 0 3 2

This course will cover an introduction to CNC machinings, the operation of the CNC vertical mill, a study of "G" and "M" codes, program writing, loading programs into the vertical mill, editing programs, and the running of programs on the CNC vertical mill. Prerequisite: MEC 1103 or have equivalent machine shop experience. Corequisite: MEC 1104 or have equivalent machine shop experience.

MEC 1115 Metallurgy for Machinist 2 0 3 3

This course provides an investigation into the properties of metals and tests to determine their uses. It includes the study of chemical, physical and mechanical properties of metals. Topics to be studied are: identification of metals, extracting of metals from ores, classification of metals, heat treating of metals, and testing of metals. Prerequisite: None.

MEC 1117 Metallurgy for Welders 2 0 3 3

This course is specifically designed to introduce the welding student to the science of metallurgy with the aim of providing an understanding of the effects of welding heat upon the metals being joined. An understanding of the proper heat treatments of both ferrous parts and nonferrous parts gives students insight into how heat affects the welding process. During this course, the welder is introduced to hardness testing, mechanical testing, mechanical and nondestructive testing of welds, and metallographic techniques including microscopic examination of the structures of metals. Prerequisite: None.

MEC 1120 Machine Processes 1 0 6 3

This course is the study of practices used in metalworking shops and an introduction to how materials can be utilized. Demonstration of the metalworking lathes, drills, milling machines, shapers, and a study of the capabilities of these machines are also included. Prerequisite: None.

NMT 105 Nuclear Medicine Technology I 2 0 0 2

This course will provide the student with an overview of the field of nuclear medicine. The course will examine the types of procedures performed in nuclear medicine, a brief history of the field, general patient care, and practical radiation safety. Prerequisite: None.

NMT 106 Nuclear Medicine Technology II 2 0 0 2

This course will introduce the student to their responsibilities as health care personnel. The emphasis of the course will be on various aspects of the student-patient relationship. The course will also deal with other interpersonal relationships that the students will face as members of the health care team. Prerequisite: None.

NMT 107 Nuclear Medicine Technology III 2 2 0 3

This course will introduce the student to the instrumentation of nuclear medicine and the area of the radiopharmacy. The emphasis of the course will be on the practical aspects rather than the theoretical aspects. Prerequisite: NMT 105.

NMT 108 Nuclear Medicine Technology IV 3 0 0 3

This course deals with In Vivo nuclear medicine procedures. A cookbook type format will be used to present all routine In Vivo procedures. Prerequisite: NMT 105.

NMT 111 Principles of Nuclear Medicine I **2 0 0 2**

This course will deal with In Vivo nuclear medicine procedures. During the course, the students will examine studies pertaining to the central nervous system, pulmonary system, and gastrointestinal tract. Prerequisite: NMT 108.

NMT 115 Orientation to Clinical Nuclear Medicine **0 2 3 2**

This course will provide the student with an orientation to the clinical aspects of the allied health specialty of nuclear medicine technology. During this course, the student will receive lab and clinical instruction to acquaint him with the language of the allied health specialty and familiarize him with the physical layout of the clinical areas, the equipment used, and the procedures performed in the clinical facilities. Prerequisite: None.

NMT 116 Nuclear Physics **2 0 0 2**

This course covers nuclear decay schemes and more complicated concepts of radioactive decay. Also discussed are interactions of radiation with matter and the calculations and measurement of radiation doses. Prerequisite: PHY 102.

NMT 117 Health Physics **1 0 0 1**

During this course, students will study protective regulations, monitoring methods, techniques for reducing exposure of patients and technologists, and the Nuclear Regulatory Commission and N.C. Radiation Protection Program requirements. Prerequisite: None.

NMT 119 Introduction to Clinical Practice I **0 2 6 3**

This is the first of a two-course series designed to introduce the student to the clinical practice of nuclear medicine technology. During the course, the student will be assigned to four clinical rotations. The student will assist the supervising technologist with the routine duties of each rotation. Prerequisites: SAF 3005 and NMT 115.

NMT 124 Introduction to Clinical Practice II **0 0 12 4**

This is the second course in a two-course series designed to introduce the student to the clinical practice of nuclear medicine technology. During this course, the student will be assigned to six clinical rotations. The student will assist the supervising staff technologist with the routine duties of each rotation. Upon completion of this course, the student will have been exposed to all phases of the clinical practic. Prerequisites: SAF 3005 and NMT 115.

NMT 201 Clinical Practice **0 0 21 7**

This is one of four courses designed to give the student an advanced understanding of clinical practice. The student will have three rotations selected to provide an opportunity to experience various aspects of nuclear medicine technology. Prerequisites: NMT 115, NMT 119, NMT 124, BIO 108, and SAF 3005.

NMT 202 Clinical Practice **0 0 21 7**

This is one of four courses designed to give the student an advanced understanding of clinical practice. The student will have three rotations selected to provide an opportunity to experience various aspects of nuclear medicine technology. Prerequisites: NMT 115, NMT 119, NMT 124, BIO 108, and SAF 3005.

NMT 203 Clinical Practice 0 0 21 7

This is one of four courses designed to give the student an advanced understanding of clinical practice. The student will have three rotations selected to provide an opportunity to experience various aspects of nuclear medicine technology. Prerequisites: NMT 115, NMT 119, NMT 124, BIO 108, and SAF 3005.

NMT 204 Clinical Practice 0 0 21 7

This is one of four courses designed to give the student an advanced understanding of clinical practice. The student will have three rotations selected to provide an opportunity to experience various aspects of nuclear medicine technology. Prerequisites: NMT 115, NMT 119, NMT 124, BIO 108, and SAF 3005.

NMT 213 Principles of Nuclear Pharmacy 3 0 0 3

Students will receive classroom instruction related to the operation of a nuclear pharmacy. Topics covered will include mathematics, radionuclide generators, radiopharmaceuticals, quality control of radiopharmaceuticals, and common nuclear pharmacy procedures. Prerequisite: None.

NMT 220 Instrumentation I 2 0 0 2

This course will provide the students with basic information about nuclear medicine instrumentation. The course will focus on the operation of components that are common to the majority of the instruments used in nuclear medicine. In addition to the common components, the course will also examine the operation and utilization of common auxiliary devices. Prerequisites: MAT 116 and PHY 102.

NMT 221 Principles of Nuclear Medicine II 2 0 0 2

This course will deal with In Vivo nuclear medicine procedures. During the course, the students will examine studies pertaining to the skeletal system, the cardiovascular system, and the thyroid gland. Prerequisite: NMT 108.

NMT 225 Computers in Nuclear Medicine 3 0 0 3

This course will provide the student with a general introduction to the operation of computers and the application of computers to the field of nuclear medicine. Prerequisite: NMT 107.

NMT 231 Principles of Nuclear Medicine III 2 0 0 2

This course deals with In Vivo nuclear medicine procedures. During the course, the students will examine the studies pertaining to the urinary system, In Vivo lab procedures, and therapy procedures. Prerequisite: NMT 108.

NMT 235 Instrumentation II 2 2 0 3

This course will develop the students' understanding of the use of nuclear counting statistics and the operation of nuclear medicine instruments. The primary focus of the course will be on theory of operation of gas detectors and sodium iodide scintillation detectors. In addition, the students will examine the operational characteristics, quality control procedures, and practical utilization of selected instruments. Prerequisite: NMT 220.

NMT 245 Instrumentation III 2 2 0 3

This is the last of three courses designed to develop the students' understanding of nuclear medicine instruments. The content of the course will include collimators, rectilinear scanners, gamma cameras, and computers. The primary focus of the course will be on theory of operation, operational characteristics, quality control procedures, and the practical utilization of the instruments covered. Prerequisite: NMT 220.

NMT 251 Principles of In Vitro Nuclear Medicine I 2 2 0 3

This is the first of two courses designed to develop the students' skills and knowledge in the area of In Vitro nuclear medicine. The focus of the course will be on laboratory skills, selected aspects of general chemistry, and selected aspects of biochemistry. Prerequisite: CHM 103.

NMT 258 Principles of In Vitro Nuclear Medicine II 2 2 0 3

This is the second course in a two-course series designed to develop the students' skills and knowledge in the area of In Vitro nuclear medicine. The primary focus of the course will be on the priciples of competitive protein binding assays and the procedure for common assays. Prerequisite: NMT 251.

NMT 289 Radiobiology 2 0 0 2

This is a course in which the fundamentals of radiobiology, a system's sensitivity to radiation (normal and neoplastic), radiation pathology, and the biological effects of radiation are stressed. Emphasis is placed on the effects of radiation and the effects of radiation absorption on tissue and tissue recovery rate. Prerequisite: NMT 116.

NMT 290 Nuclear Medicine Technology Seminar 2 0 0 2

This course gives the student an opportunity to review any aspects of nuclear technology in which he has special interest. Guest speakers will be invited to present papers on special topics. Prerequisites: NMT 201, NMT 202, NMT 203, and NMT 204.

NMT 292 Nuclear Medicine Technology Review 2 0 0 2

This course will be a comprehensive review of the nuclear medicine program. The primary focus will be on routine procedures and information that is vital to a nuclear medicine technologist. The culmination of the course will be a comprehensive exam. Prerequisites: NMT 111, NMT 116, NMT 117, NMT 213, NMT 221, NMT 231, NMT 235, NMT 245, NMT 251, and NMT 289.

NMT 300 Clinical Practice Review 0 0 15 5

During this course, the student will be assigned to six clinical rotations. The rotations will be chosen to strengthen demonstrated weaknesses of the student's previous clinical performance. Prerequisites: NMT 201, NMT 202, NMT 203, NMT 204, and SAF 3005.

NUR 119 Pharmacology 2 2 0 3

This course is designed to prepare the students for safe administration of medications. Emphasis is placed on the mathematics of drugs and solutions, methods of administration, and the general classification of pharmacological agents. Knowledge gained in pharmacology will be incorporated into the nursing process as it applies to nursing care. Instructions in this area will be implemented through the use of self-study, group activities, audiovisual aids, demonstrations, laboratory practice, and lecture. Evaluations will measure the student's ability to meet course objectives through the use of testing, special assignments, and laboratory experiences. Planned laboratory experiences are designed to teach the student correct medication administration techniques. Prerequisite: None. Corequisite: NUR 120 or written permission of ADN coordinator.

NUR 120 Medical — Surgical Nursing I 4 2 6 7

This course provides the students an orientation to the body systems approach to nursing care, the nursing process, and an orientation to the field of health. Included are an exploration of the events which have influenced the practice of nursing, the role of the nurse, legal aspects, and the way in which the community provides health services. There is an introduction to the dermatological system and the care of the dying patient. Planned clinical experience is designed to teach the student basic nursing skills and provide introductory experience. Emphasis is placed on providing basic physical care and beginning to meet the psychosocial needs of the patient. Instruction in these areas will be implemented through the use of self-study, group activities, audiovisual aids, demonstrations, laboratory practice, community resources, lectures, and planned clinical experience. Evaluations will measure the students' ability to meet course objectives through the use of testing and special assignments and clinical experience. Satisfactory completion of the clinical component of the course is required in order to pass the course. Prerequisite or Corequisite: NUR 119.

NUR 122 Medical — Surgical Nursing II 5 2 6 8

This course emphasizes the use of the nursing process in the study of the musculoskeletal, hemological and renal systems. It stresses assessment, intervention, and evaluation for patients with common problems of the gastrointestinal or renal systems. Included are an introduction to special senses and oncologic nursing. Planned clinical experience will concentrate on giving basic physical care, administering medications, using basic communication techniques, understanding defense mechanisms and implementing health teaching. Evaluation will include the response of the patient to the nursing care and a self-evaluation. Instruction in these areas will be implemented through the use of self-study, group activities, audiovisual aids, demonstrations, laboratory practice, community resources, lectures, and planned clinical experiences. Evaluations will measure the students' ability to meet course objectives through the use of testing, special assignments, nursing care plans, and clinical experience. Statisfactory completion of the clinical components of the course is required in order to pass the course. Prerequisites: BIO 107, NUR 119, and NUR 120.

NUR 124 Medical — Surgical Nursing III 4 2 12 9

This course allows the student to continue the body system approach in utilizing the nursing process in giving nursing care. Consideration will be given to man's basic needs and his ability to adapt to a constantly changing environment. Areas of study in theory and in the clinical setting are the gastrointestinal system, fluids and electrolytes, and pateints having surgery. Instruction in these areas will be implemented through the use of self-study, group activities, audiovisual aids, demonstrations and laboratory practice, community resources, lectures, and planned clinical experience. Evaluations measure the students' ability to meet course objectives through the use of testing, special assignments, nursing care plans and clinical experience. Satisfactory completion of the clinical components of the course is required in order to pass the course. Prerequisites: NUR 119, NUR 120, NUR 122, BIO 107, BIO 108, and NUT 101.

NUR 126 Medical — Surgical Nursing IV **5 0 12 9**

This course allows the student to continue the body system approach in utilizing the nursing process with special emphasis placed on respiratory, endocrine, and cardiovascular disorders in clinical practice as well as in theory. The unique characteristics of aging as it influences health needs will also be included. Instruction in these areas will be implemented through the use of self-study, group activities, audiovisual aids, demonstrations and laboratory practice, community resources, lectures, and planned clinical practice. Evaluations will measure the students' ability to meet course objectives through the use of testing, special assignments, nursing care plans and clinical experiences. Satisfactory completion of the clinical components of the course is required in order to pass the course. Prerequisites: BIO 107, BIO 108, BIO 111, NUR 119, NUR 120, NUR 122, NUR 124, and NUT 101.

NUR 200 Nursing Seminar **3 0 0 3**

The purpose of this course is to help prepare students for the transition from student to graduate. Areas to be discussed include applying for a position, the phenomenon of reality shock, ethical dilemmas facing the nurse, and the impact of the Nurse Practice Act on nursing practice. Information on completing the application for licensure will also be included. During the course, students will be encouraged to examine value systems in relation to reality shock and ethical dilemmas, to explore alternate choices in given situations, and to share the rationale for their decisions. Prerequisite: NUR 120, 122, 124, 126, 216, 218.

NUR 216 Maternity Nursing **4 0 12 8**

The complete maternity cycle will be presented with emphasis on family-centered care. Content will be offered in the physiological and psychosocial development throughout the childbearing experience. Aspects of gynecology relative to child birth will be introduced. This course will provide concepts regarding the roles of families and nurses in today's changing society. This course is also designed to give the students an opportunity to apply knowledge and skills gained in the care of the childbearing family. An opportunity will be given for the student to utilize the nursing process in planning care for families during the childbearing process. Health teaching will be emphasized. Instruction in this area will be implemented through the use of self-study, group activities, nursing care plans, audiovisual aids, community resources, lectures, and planned patient assignments in the prenatal clinic, labor and delivery room, postpartum unit, and the newborn nursery. Evaluations will measure the students ability to meet the course objectives through the use of testing, special assignments, and planned clinical experience. Satisfactory completion of the clinical components of the course is required in order to pass the course. Prerequisites: BIO 107, BIO 108, BIO 111, BIO 112, NUR 119, NUR 120, NUR 122, NUR 124, NUR 126, NUT 101, and PSY 110.

NUR 218 Pediatric Nursing 4 0 12 8

This course is designed to provide the student with the opportunity to study disease conditions of the body systems seen commonly in children. It will also allow the student to apply this knowledge and previously learned scientific principles to the nursing care of children in a clinical setting. The nursing process will be the tool used to determine and meet the needs of the pediatric patient with specific problems or disease entities. Included are an exploration of the history of pediatric nursing, trends in health care in children, and a study of current child care laws. Emphasis will be placed upon the nurse's role in meeting the needs of a child according to his/her stage of growth and development as well as responding supportively to the family during their child's illness. The preventative aspects as well as the available community resources will be discussed both in the classroom and the clinical areas. Instruction in these areas will be implemented through the use of self-study, group activities, nursing care plans, audiovisual aids, community resources, lectures, and planned patient assignments in the hospitals and clinics. Evaluations measure the students' ability to meet the course objectives through the use of testing, nursing care plans, special assignments, and planned clinical experience. Satisfactory completion of the clinical component of the course is required in order to pass the course. Prerequisites: BIO 107, BIO 108, BIO 111, BIO 112, NUR 119, NUR 120, NUR 122, NUR 124, NUR 126, NUT 101, and PSY 110.

NUR 220 Medical — Surgical Nursing V 4 0 18 5

This course provides the student an opportunity to integrate previously acquired knowledge of body systems and the nursing process with specific emphasis on the neurological and multi-system disorders. Planned clinical experience is designed with emphasis on application of this integration as exhibited by individual patient needs. Instructions in this area will be implemented through the use self-study, group activities, audiovisual aids, demonstrations and laboratory practice, community resources and lectures. Evaluations will measure the students' ability to meet course objectives through the use of testing, nursing care plans. AV aids, special assignments and planned clinical experience. Satisfactory completion of the clinical component of the course is required in order to pass the course. Prerequisites: BIO 107, BIO 108, BIO 111, BIO 112, NUR 119, NUR 120, NUR 122, NUR 124, NUR 126, and NUT 101.

NUR 222 Medical — Surgical Nursing VI 4 0 18 5

This final course in medical—surgical nursing provides the students an opportunity to assimilate the previously acquired knowledge of body systems and the nursing process and to apply it to individualized nursing care. The area of focus deals with multi-system disorders. Planned clinical experience will also be designed to help the student adjust to the realities of employment as a graduate using bicultural orientation theories. Instruction will be implemented through the use of self-study, group activities, audiovisual aids, demonstrations and laboratory practices, community resources and lectures. Evaluations measure the students' ability to meet course objectives through the use of testing, special assignments, and clinical experience. Satisfactory completion of the clinical components of the course is required in order to pass the course. Prerequisites: BIO 107, BIO 108, BIO 111, BIO 112, NUR 119, NUR 120, NUR 122, NUR 124, NUR 126, NUR 220, and NUT 101.

NUR 224 Psychiatric Nursing 6 0 12 5

This course is designed to provide a foundation of knowledge from which the student will identify elements of healthy behavior as well as maladaptive behaviors of the psychosocial system that are indicative of psychiatric disorders. Emphasis is placed on continued development of the students' therapeutic nurse interpersonal relationship as it is related to assisting the psychologically distressed person. The history, current treatment modalities, the role of the nurse, legal aspects, and psycho-dynamics of behavior disorders will be stressed. The student will be introduced to various techniques and skills utilized in assisting the person with psychiatric disorders to improve his sense of well-being and restore his psychological equilibrium. Instruction in these areas will be implemented through the use of self-study, group activities, audiovisual aids, demonstrations in clinical practice, community resources, lectures, and process recordings. Evaluations of the students' ability to meet course objectives will be measured through the use of testing, special assignments, and clinical experience. Satisfactory completion of the clinical component of the course is required in order to pass the course. Prerequisites: BIO 107, BIO 108, BIO 111, BIO 112, NUR 119, NUR 120, NUR 122, NUR 124, NUR 126, NUT 101, PSY 101, PSY 110, PSY 111, and SOC 103.

NUT 001 Basic Nutrition 3 0 0 0

This course is the study of basic nutrition with emphasis on functions and sources of nutrients needed for a balanced daily diet, including an overview of basic food elements, digestion, absorption, and metabolism. Prerequisite: None.

NUT 101 General Nutrition 3 0 0 3

Basic principles of human nutrition with emphasis on the nutrients and factors which affect their utilization in the human body are studied. Prerequisite: None.

NUT 102 Nutrition for Young Children 3 2 0 4

This course is the study of basic nutrition with emphasis on methods of helping young children and their families learn nutritional concepts and on planning balanced diets for preschool children. Prerequisite: None. Corequisite: EDU 103.

PHY 001 Pre-Technical Physics 3 2 0 0

This is a review of some of the basic concepts of physics. The topics included are systems of measurement, force and motion, and the properties of materials. Emphasis is placed on laboratory procedures and graphical analysis. Prerequisite: None.

PHY 100 Introduction to Physics 3 0 0 3

This course is an introduction to the problems and concepts of physics. The major areas covered are fundamental units and systems of measurements, motion, forces, momentum, work, energy, and power. Quantitative problems involve the use of elementary algebra and trigonometry. Prerequisite: None.

PHY 101 Concepts in Physics 3 0 0 3

This course is a nonmathematical introduction to problems and concepts of physics. The major areas covered are mathematics, properties of mathematics, heat, sound, light, electricity, and atomic theory. Emphasis will be on the association of physical principles with everyday phenomena. Prerequisite: None.

PHY 102 Electricity and Electronics **3 0 0 3**

This is a study of electricity and electronics including the concepts of electric and magnetic fields, electric potential, electric circuits, and solidstate devices. Emphasis is on medical applications of electricity and electronics. Quantitative problems involve the use of elementary algebra and trigonometry. Prerequisites: MAT 113 and PHY 101 or PHY 100.

PHY 105 General Physics I **4 0 0 4**

This course is the first in a series of two courses which introduce the basic topics of physics. The topics covered include units of measurement, motion, force, momentum, forces of nature, energy, temperature, heat, electric fields, and currents. Quantitative problems include the use of elementary algebra. Prerequisite: MAT 113 or MAT 101.

PHY 106 General Physics II **4 0 0 4**

This course is the second in a series of two courses which introduce the basic topics of physics. The topics covered include magnetism, electromagnetism, waves and radiation, principles of light applied to x-rays, elementary quantum concepts of atoms, and atomic radiation. Quantitative problems include the use of elementary algebra. Prerequisite: PHY 105.

PHY 111 Physics — Mechanics **3 2 0 4**

This is a fundamental course which develops the concepts of force, motion, work, energy, and power. Also included are the topics of vector analysis, rotational motion, and basic machines. Prerequisite: None. Corequisite: MAT 102.

PHY 112 Physics — Materials and Heat **3 2 0 4**

This is a course which examines the properties of solids, liquids at rest and in motion, gas laws and their application, heat and thermodynamics. Emphasis is on practical application through the use of realistic problems and laboratory exercises. Prerequisite: PHY 111.

PHY 113 Physics — Electricity **3 2 0 4**

This is a study of the basic principles of electricity including electron theory, direct current circuits, alternating current circuits, electromagnetic interactions, and batteries. Emphasis is on practical application through the study of electrical power generation, transmission, and conversion devices. Prerequisite: PHY 111.

PHY 114 Physics — Light and Sound **3 2 0 4**

This is a study of wave motion and the generation, transmission, and detection of sound and light. Topics include acoustics, illumination, optical devices, and lasers. Practical application is emphasized through exercises and acoustical analysis of buildings and lighting system design and layout. Prerequisite: PHY 111.

PHY 1101 Applied Science I **3 2 0 4**

This is an introduction to some physical principles and their application in industry. Topics included are measurements in the English and metric system and properties of solids, liquids, and gases. Practical application is stressed by use of realistic problems and laboratory exercises. Prerequisite: None.

PHY 1102 Applied Science II 3 2 0 4

This course is a study of the concepts of force, motion, work, energy, power, and heat. Practical applications are realized through the study of friction and simple machines and the relationship between thermal and mechanical energy. Prerequisite: None.

PHY 1103 Fundamentals of Electricity 3 2 0 4

This course is a study of elementary principles of electricity including the structure of matter and electron theory, basic electrical units, and the relationship of current, voltage, resistance, and power in series, parallel, and combination circuits. Prerequisite: None.

PHY 1104 Applied Science IV 3 2 0 4

This course is a study of wave motion and sound and light. Practical applications are stressed through the study of acoustics, musical rounds, color mixing, optical devices, illumination, and the laser. Prerequisite: None.

PHY 1114 Science for Printers 3 2 0 4

This course is designed to acquaint the student with some of the facts and principles concerning the properties and structure of matter. Major topics considered will be the general and specific properties of matter, atomic theory, physical and chemical changes, theories of light, photometry, mirrors and lenses, reflection, refraction, and color. Prerequisite: MAT 1150.

PLU 1131 Plumbing I 8 0 15 13

This course is an introduction to the plumbing trade. It includes plumbing systems, use and care of hand tools, and selection of plumbing materials. The student will learn to solder copper pipe, cement plastic pipe, and pour lead joints. Plumbing layouts and the study of the North Carolina Plumbing Code will also be introduced. Prerequisite: None.

PLU 1132 Plumbing II 3 0 15 8

This course is a continuation of PLU 1131 Plumbing I. The student will practice "roughing-in" houses, which includes measuring for and cutting holes in stud walls; figuring proper slope in pipe; and locating stacks, stack vents, toilets, and drains. The student will also learn to determine the size of water and waste pipes and how to install them. The study of plumbing layouts and the North Carolina Plumbing Code will be continued. Prerequisite: PLU 1131.

PLU 1133 Plumbing III 5 0 18 11

This course is a continuation of PLU 1132 Plumbing II. General plumbing practice will be continued. However, in this quarter the student will assist in the selection and installation of all types of fixtures as well as the selection, installation, and servicing of water heaters. The study of plumbing layouts and the North Carolina Plumbing Code will be continued. Prerequisite: PLU 1132.

PLU 1134 Plumbing IV 3 0 21 10

This course is a continuation of PLU 1133 Plumbing III. The installation of plumbing will be continued. Additionally, the topics of plumbing repairs, troubleshooting, and unclogging drains will be covered. The study of layouts and plumbing codes will be concluded. Prerequisite: PLU 1133.

PME 1101 Internal Combustion Engines 4 0 15 9

This course includes the development of a thorough knowledge and ability in using, maintaining, and storing the various hand tools and measuring devices needed in engine repair work and the study of the construction and operation of components of internal combustion engines. Testing the engine performance; servicing and maintenance of pistons, valves, cams, and camshafts; fuel and exhaust systems; cooling systems; proper lubrication; and methods of testing, diagnosing, and repairing are covered. Prerequisite: None.

PME 1102 Automotive Electrical Systems 5 0 15 10

This course includes a thorough study of the electrical system of the automobile. The battery, cranking mechanisms, generators, ignition, accessories, wiring, special tools, and testing equipment for the electrical system are covered. Prerequisite: None.

PME 1103 Automotive Fuel Systems 2 0 3 3

This course covers the characteristics of fuels, types of fuel systems, fuel pumps, carbuerators, fuel injectors, special tools, and testing equipment for the fuel system. Prerequisite: None.

PNE 1101 Fundamentals of Practical Nursing 7 0 0 7

This course assists the student in assuming the role of student practical nurse in the hospital setting. In the classroom the student learns the hand skills and the knowledge necessary for beginning care and relationships with patients. It is taught concurrently with PNE 1201 Fundamentals Lab. Prerequisite: None.

PNE 1102 Nutrition and Diet Therapy 3 0 0 3

Nutritional requirements and planning for all age groups are included in this course. It presents religious, cultural, social, and psychological factors that change dietary needs and is the study of therapeutic diets that affect disease conditions. Prerequisite: None.

PNE 1103 Anatomy and Physiology 4 0 0 4

This course is the study of the general plan of the body and the nine systems. It is designed to help the student understand how the human body controls its functions, stands erect and moves, distributes food and oxygen, removes waste, and provides for species survival. Each unit contains a section of medical terminology. Prerequisite: None.

PNE 1105 Drug Administration I 3 0 0 3

This course is designed for instruction in safe techniques for drug administration. Systems for measuring drugs are included with practice in solving drug problems of measurement and conversion. Prerequisite: None.

PNE 1106 Medical—Surgical Nursing I 8 0 0 8

This course expands the knowledge of basic nursing care taught in PNE 1201 Fundamentals Lab by applying basic skills to specific needs of the following types of patients: geriatric, surgical, cancer, and the terminally ill. Varying rehabilitation needs will be included. Lessons in general causes of disease and the body's response will be followed by nursing care of medical and surgical conditions of the circulatory, endocrine, and reproductive systems. This course is taught concurrently with PNE 1208 Medical — Surgical Practicum I. Prerequisites: PNE 1101, PNE 1102, PNE 1103, PNE 1105, and PNE 1201.

PNE 1107 Maternity Nursing **4 0 0 4**

This course presents the nursing care of the normal obstetrical patient and newborn child. Emphasis is placed on provision of better and safer nursing care for the expectant mother and her baby. This course is taught concurrently with PNE 1206 Maternity Practicum. Prerequisites: PNE 1101, PNE 1102, PNE 1103, PNE 1105. PNE 1201, and PNE 1208.

PNE 1108 Nursing of Children **4 0 0 4**

The normal growth and development pattern of the child from infancy through adolescence is studied in this course. Methods of meeting the needs of the hospitalized child are included. The student is prepared to care for hospitalized children with common disorders. Material on infectious disease is included. This course is taught concurrently with PNE 1204 Pediatric Practicum. Prerequisites: PNE 1101, PNE 1102, PNE 1103, PNE 1105, PNE 1106, PNE 1111, PNE 1201, and PNE 1208.

PNE 1110 Medical — Surgical Nursing II **8 0 0 8**

This course includes the study of symptoms, medical and surgical treatments, and nursing care for common disorders which occur in adults as related to the following body systems; respiratory, gastrointestinal and accessory organs, nervous, musculoskeletal, urinary, integumentary, and the eye, ear, and blood-forming organs. Less common conditions are identified or discussed. Basic first aid principles and rationale are included. This course is taught concurrently with PNE 1209 Medical — Surgical Practicum II. Prerequisites: PNE 1101, PNE 1102, PNE 1103, PNE 1105, and PNE 1106, PNE 1107, PNE 1108, and PNE 1111.

PNE 1111 Drug Administration II **4 0 0 4**

Factual material is given in this course on dosages and effects of drugs. There is experience with equipment and techniques used in preparing and giving injections. Insulin therapy and the storage, safety regulations, and preparation of narcotics are studied. This course is taught concurrently with PNE 1208 Medical — Surgical Practicum I. Prerequisites: PNE 1105 and PNE 1201.

PNE 1115 Personal and Vocational Relationships **3 0 0 3**

In this course the student is assisted in assuming the role of a graduate practical nurse. The content includes advanced nursing ethics, laws that guide nursing practice, and a review of the role of the practical nurse as student and graduate. Career opportunities and responsibilities will be evaluated. Prerequisites: PNE 1101, PNE 1102, PNE 1103, PNE 1105, PNE 1106, PNE 1107, PNE 1108, PNE 1111, PNE 1201, PNE 1204, PNE 1206, and PNE 1208.

PNE 1201 Fundamentals Lab **0 6 0 3**

This course is taught concurrently with PNE 1101 Fundamentals of Practical Nursing. The hand skills for nursing are performed in hospital units with patients. The content taught includes experiences in basic communication techniques, bedmaking, giving hygienic care, vital signs, safety procedures, charting, reporting, and assessing patients' needs. Prerequisite: None.

PNE 1204 Pediatric Practicum (½ quarter) **1 0 15 3**
This course, taught concurrently with PNE 1108 Nursing for Children, provides experience with nursing care of children ranging in age from infancy to adolescence. Emphasis will be placed on applying theory to practice through adapting nursing care plans to patients' stages of growth and development and to the existing condition or disease. Students will learn to adapt nursing care and procedures, medication administration, and documentation of care to the needs of children and to the routing of the pediatric unit. Prerequisites: PNE 1201 and PNE 1208.

PNE 1206 Maternity Practicum (½ quarter) **1 0 15 3**
This course is taught concurrently with PNE 1107 Maternity Nursing. It provides application of theory to practice through orientations and teacher-supervised experiences in the labor and delivery suite, the newborn nursery, and the postpartal unit. The student has opportunities to learn through participation in and observation of nursing care and procedures before, during, and after delivery. Prerequisites: PNE 1201 and PNE 1208.

PNE 1208 Medical—Surgical Practicum I **1 0 15 6**
This course, taught concurrently with PNE 1106 Medical-Surgical Nursing I, provides experience with adult patients in a hospital. Patients with medical and surgical disorders are assigned for student care. Emphasis is on nursing procedures, solving care problems, and drug administration. Prerequisites: PNE 1101, PNE 1102, PNE 1103, PNE 1105, and PNE 1201.

PNE 1209 Medical—Surgical Practicum II **1 0 15 6**
This course provides experience with adult patients in a hospital. Patients with medical and surgical conditions are assigned for patient care. Emphasis is placed on preparing the student for the role of graduate practical nurse by providing more complex assignments and through participation in and implementation of the health care plan developed by the registered nurse. This course is taught concurrently with PNE 1110 Medical—Surgical Nursing II. Prerequisites: PNE 1201, PNE 1204, PNE 1206, and PNE 1208.

PRN 1101 Printer's English **3 0 0 3**
This is not a course for beginners in English but is intended to provide a review of the essentials of English as they relate to the art of printing. The course deals with compounding words, modern punctuation, capitalization, syllabication, contractions, homonyms, errors in English words, sentence structure, and the marks in proofreading. Prerequisite: None.

PRN 1131 Introduction to Printing **6 0 12 10**
This course is an introduction to the printing trade. Instruction will include student orientation, a historical outline of graphic arts, familiarization of terms, equipment, and tools used in printing, and demonstrations of the equipment used in graphic arts. The student will be required to produce a printing project. Safe practices and safety rules are stressed. Prerequisite: None.

PRN 1132 Offset Printing I **4 0 12 8**
This course is an introduction to offset printing. The operation of offset presses such as Multilith 1250, 1250W, and ATF Chief will be covered. The camera,

stripping, and platemaking will also be covered. The student will be required to operate each of the pieces of equipment. Prerequisites: BUS 1122, MAT 1150, PRN 1101, and PRN 1131.

PRN 1133 Offset Printing II **6 0 15 11**

A continuation of PRN 1132 Offset Printing I, this course will place emphasis on the use and maintenance of the larger press. Students will be introduced to the production of two-, three-, and four-color printing. This course is also an advanced study of the process camera and related darkroom equipment. Prerequisites: PHY 1114, PRN 1132, and PRN 1134.

PRN 1134 Composition I **3 0 6 5**

The students will be instructed in the methods of copy preparation and the use of equipment in that phase of graphic arts. After the students learn how to prepare the copy, they will be required to produce one or more jobs. Prerequisites: BUS 1122, MAT 1150, PRN 1101, and PRN 1131.

PRN 1135 Composition II **3 0 3 4**

This course is a continuation of PRN 1134 Composition I. The major part of this course will be devoted to cold type composition by the machine method. Machines covered will include the typewriter, varityper, and headliner. Instruction will include photographs and color. Prerequisites: PHY 1114, PRN 1132, and PRN 1134.

PRN 1136 Estimating **5 0 0 5**

This course covers fundamentals of estimating costs of printing. Included in the instruction are the role of the estimator, basic cost areas, paper and layouts, preparatory composition, the press, finishing, estimate forms, estimating practice, and use of the Franklin Catalog. Prerequisites: PRN 1133 and PRN 1135.

PRN 1137 Printing Project **0 0 21 7**

The printing project will be determined after a conference between the instructor and student. The project will be in an area in which the student has had the fundamentals. Prerequisites: PRN 1133 and PRN 1135.

PSM 100 Postal Service History and Organization **3 0 0 3**

This course is designed to trace the delivery of written communication and merchandise from earlier eras to the present. It compares the private, corporate, and governmental agencies which have been responsible for mail service throughout the world, but particularly in the United States. The current postal organization as mandated by public law 91-37B is studied. Postal philosophies, policies, procedures, rules and regulations are also studied and traced to the current organization. Prerequisite: None.

PSM 101 Postal Service Labor Management **5 0 0 5**

The course presents an overview of laws and practices as related to Labor-Management in the Postal Service. It starts with the development of labor unions in the federal government and reviews the current status, problems, and/or issues in the Postal Service. Emphasis is placed on the National and Local Agreements, the various bargaining units and associations in the U. S. Postal Service, the grievance procedures, the disciplinary action procedures, and the National Labor Relations Board. Prerequisite: None.

PSY 101 Psychology 3 0 0 3

This course is geared to study the principles of human behavior with reference to thinking, learning, memory, perception, emotional life, individual differences in intelligence, aptitude, personality, the scientific nature of psychological investigations, and research findings related to daily life. Prerequisite: None.

PSY 102 General Psychology 5 0 0 5

This course is a study of the various fields of psychology; the developmental process, motivation, emotion, frustration and adjustment, mental health, attention and perception, and problems of group living. Attention is given to applications of these topics to problems of study, self-understanding, and adjustment to the demands of society. Prerequisite: None.

PSY 105 Human Growth and Development: Prenatal and Infant 3 0 0 3

This course is a detailed study of the developmental sequence of the prenatal and infant periods with emphasis on developmental influences and conditions necessary for optimal development of individuals. Prerequisite: PSY 102.

PSY 108 Abnormal Psychology 5 0 0 5

This course offers an introduction to behavior pathology. The etiology, diagnosis, and prognosis of abnormal behavior, neurosis, psychosis, character disorders, and psychosomatic reactions are among the topics included in the study. Prerequisite: PSY 102 or equivalent.

PSY 110 Lifespan Psychology 3 0 0 3

This course will deal with the human life span from conception through old age. It is intended to give the student a thorough grounding in the basic principles of developmental psychology. Emphasis will be placed on the theories of Erikson, Piaget and Havighurst. Physiological and psychological critical periods in the development of the individual will be identified and their implications explored. Special attention will be given to the stress periods of childhood, adolescence, middle age, and old age. Prerequisite: PSY 101 or permission of instructor.

PSY 111 Abnormal Behavior 3 0 0 3

This course offers an introduction to behavior pathology. Students will be given a basic grounding in the etiology, diagnosis, and prognosis of various kinds of abnormal behavior. Topics in the study will include neurosis, psychosis, addiction, suicide, character disorders, psychosomatic reactions, childhood disorders, and geriatric disabilities. Prerequisite: PSY 101.

PSY 112 Personality Development 3 0 0 3

This course is designed to help the student recognize the importance of the physical, intellectual, social, and emotional dimensions of personality. Grooming and methods of personality development are emphasized. Prerequisite: None.

PSY 169 Social Psychology of Health and Illness 3 0 0 3

In studying how culture defines one's responses to illness, both the psychological and sociological factors which play such an eminent part in one's development will be investigated. The cultural principles attributed to illness, symbols of illness, and situations associated with illness not only illustrate how illness affects family patterns and development, but also how such psychological and sociological principles affect patient—professional, family—patient, and family—professional relationships. Prerequisite: None.

PSY 205 Child Psychology 3 0 0 3

The objective of this course is to consider the significant phases of motor, cognitive, emotional, and social development of the child as these are influenced by genetic, cultural, and individual element from the prenatal period to adolescence. Prerequisite: PSY 101 or PSY 102.

PSY 206 Applied Psychology 3 0 0 3

This is a study of the principles of psychology that will be of assistance in the understanding of interpersonal relationships on the job. Motivation, feelings, and emotions are considered with particular reference to on-the-job problems. Other topics investigated are employee selection, supervision, job satisfaction, and industrial conflicts. Attention is also given to personal and group dynamics so that the student may learn to apply the principles of mental hygiene to adjustment problems as a worker and as a member of the general community. Prerequisite: None.

PSY 1101 Human Relations 3 0 0 3

This course is a development of understanding of relationships to other persons through some of the basic principles of human psychology. Study of the problems of the individual and the work situation in relation to society, group membership, and relationships within the work situation are included. Prerequisite: None.

RDT 112 Introduction to Patient Care Techniques 2 0 0 2

Considerations for study include the patient care responsibilities of the radiographer, principles of body mechanics and effective patient-technologist communication. Radiographer reaction to acute patient care situations is also discussed. Prerequisite: None.

RDT 113 Departmental Orientation and Medical Ethics and Law 2 2 0 3

Students will be introduced to the operational aspects of the radiology department through both classroom and clinical experience. Emphasis for study includes basics of radiation protection and insights into medical ethics and law needed by the technologist. Prerequisite: None.

RDT 114 Basic Essentials of Radiologic Technology 3 2 9 7

The student is introduced to the basic essentials of Radiologic Technology. Included is a preliminary overview of radiographic and fluoroscopic equipment. Basic technical factors and radiographic accessories are discussed with emphasis placed on their effect on equipment utilization and operation. The student uses the clinical hours to fortify these basic essentials. Prerequisites: RDT 112, RDT 113.

RDT 115 Radiation Physics and Radiobiology 3 0 0 3

The basic principles behind matter, radioactivity, electricity and x-ray circuitry as related to Radiologic Technology are presented in this course. The student is introduced to radiobiology and its relationship to technical radiographic quality and radiation protection considerations. Prerequisite: PHY 101.

RDT 125 Radiographic Darkroom 2 0 0 2

This course includes lectures, demonstrations, and experiments designed to instruct in the proper use of various photographic chemicals and techniques producing radiographs of highest quality. Prerequisite: None.

RDT 137 Radiographic Technique I **3 0 0 3**

This course introduces the student to the basic concepts of radiographic production. Prerequisite: None.

RDT 138 Practicum I **0 2 15 6**

Clinical and energized lab experience is utilized with special emphasis on positioning, technique and accessories used in radiography of the upper extermity, chest and abdomen. Prerequisite: RDT 114.

RDT 139 Positioning and Related Anatomy I **3 0 0 3**

This course will deal with radiographic positioning of the upper extremity, shoulder girdle, foot, ankle, and lower leg. Special emphasis is placed upon the osseous radiographic anatomy of the particular structure. Prerequisites: BIO 108, BIO 115, and BIO 116.

RDT 148 Practicum II **0 2 24 9**

Clinical and energized laboratory experience is utilized with special emphasis placed on positioning, technique and accessories needed in radiography of the knee, femur, hip and pelvic girdle. Prerequisite: RDT 138.

RDT 149 Positioning and Related Anatomy II **3 0 0 3**

This course includes radiographic positioning of the proximal lower extremity and the entire vertebral column. Special attention is given to bony anatomy of the areas studied. Prerequisite: RDT 139

RDT 233 Seminar **2 0 0 2**

Current advancement in technology in the field are identified and discussed. Students will select a topic for research and presentation. Prerequisite: None.

RDT 237 Radiographic Technique II **3 0 0 3**

An in-depth study is presented in the selection of exposure factors and the proper use of grids, cones, and other devices which may be employed to produce high-quality radiographs. Prerequisite: RDT 137.

RDT 248 Practicum III **0 2 21 8**

Clinical and enerized laboratory experience concentrates on positioning, technique and accessories used in radiography of the vertebral column. Prerequisite: RDT 148

RDT 249 Radiation Protection **1 0 0 1**

Protective regulations, monitoring methods, and techniques for reading radiation exposure of patients and technologists are presented in this course. Prerequisite: None

RDT 250 Special Procedures I **2 0 0 2**

This course provides in-depth study into radiographic procedures requiring special imaging or approach techniques to areas previously difficult to visualize. Representative procedures include body section radiography, stereoradiography and special contract media studies of the organ systems of the head, chest, and abdomen. Prerequisite: BIO 108.

RDT 252 Special Procedures II 2 0 0 2

Emphasis for study consists of angiographic procedures for demonstration of the vascular structures of the cranium, trunk and extremities. Varied equipment types and their applications are presented for discussion. Prerequisite: RDT 250

RDT 254 Departmental Administration and Quality Assurance 3 0 0 3

This course analyzes the operational aspects of a radiology department to include finances, employee supervision, scheduling and other special problems. Organization and implementation of a departmental quality control program are discussed. Prerequisite: None.

RDT 258 Practicum IV 0 2 24 9

Radiographic positioning of the cranium as a whole and paranasal sinuses is stressed through clinical and laboratory experience. Emphasis is placed on technique and accessory equipment selection. Prerequisite: RDT 248.

RDT 261 Pediatric, Emergency and Operative Radiography 2 0 0 2

Procedures utilized in radiography of pediatric, operative and emergency radiographic examinations are examined. Discussion of positioning, technical factor selection and special care needed during these exams is pursued. Prerequisite: RDT 137.

RDT 268 Practicum V 0 2 24 9

Clinical and energized laboratory experiences emphasize positioning, technique and accessories used in radiography of the individual bony segments of the cranium. Prerequisite: RDT 258.

RDT 269 Positioning and Related Anatomy III 3 0 0 3

This course investigates anatomy and radiographic positioning of the gastrointestinal, biliary and urinary systems. Applications for radiographic equipment and accessories are presented. Prerequisite: RDT 149.

RDT 278 Practicum VI 0 2 24 9

Clinical and energized laboratory experience stresses refinement of positioning, technique skills in special and routine radiographic studies. Emphasis is placed on emergency radiography. Prerequisite: RDT 268.

RDT 279 Positioning and Related Anatomy IV 3 0 0 3

The basics of bony skull anatomy, positioning of the cranium and application for equipment/accessories needed for cranial radiography are studied. Specialized filming techniques of the paranasal sinuses, facial bones, centers of hearing and mandible are included. Prerequisite: RDT 269.

RDT 283 Radiographic Pathology 2 0 0 2

Pathological conditions which can be demonstrated radiographically are discussed as to their appearance on the radiograph. Focus for study are procedures and techniques the technologist can utilize to best demonstrate pathologies present. Prerequisite: BIO 169.

RDT 289 Film Critique I 2 0 0 2

This course is the first in a series of four which introduces the basics of film quality analysis. Students present radiographs of the upper and lower extremity, chest and abdomen for evaluation. Prerequisites: RDT 138, RDT 139.

RDT 290 Film Critique II **2 0 0 2**

Study emphasizes quality analysis of radiographs performed of the vertebral column. The adequacy of technical factors, part demonstration and overall diagnostic value is considered. Prerequisite: RDT 289.

RDT 291 Film Critique III **2 0 0 2**

This course deals with the critical analysis of radiographs of the cranium. Recognition of correct alignment and demonstration of skull anatomy is stressed. Prerequisite: RDT 290.

RDT 292 Film Critique IV **2 0 0 2**

Radiographs from special radiographic procedures are assessed as to their adequacy of part positioning, anatomy visualized and technical quality. Representative special studies for consideration include xeromammography, contrast media exams, body section radiography and operative procedures. Prerequisite: RDT 291.

RDT 301 Current Issues in Radiology Management **1 0 0 1**

Changes and innovations in staffing methods, imaging techniques, effective management by goal setting and objectives, and governmental radiation regulations will be presented for discussion. Legal aspects of technology and the growing accountibility of the technologist will be considered. Emphasis will be placed on the application and long term results of implementation of current trends in departmental operations. Prerequisite: Enrollment in seventh quarter RDT Curriculum or graduate of an AMA approved RDT program or permission of the RDT departmental chairperson.

RDT 302 Effective Communication: Technologist, Patient and the Health Team **1 0 0 1**

The role of the technologist in the health team will be examined. Communication skills necessary for effective communication, both oral and written, will be identified. Communication mechanisms needed for the exceptional patient will be explored through role play and discussion. Prerequisite: Enrollment in seventh quarter RDT Curriculum or graduate of an AMA approved RDT program or permission of the RDT departmental chairperson.

RDT 303 Technologist Motivation in the Radiology Setting **1 0 0 1**

The various ideologies of motivation will be discussed. Effective motivators for technologists possible in the clinical setting will be identified. Also to be considered is the use of an employee appraisal system as a motivator for technologist behavior. Prerequisite: Enrollment in seventh quarter RDT Curriculum or graduate of an AMA approved RDT program or permission of the RDT departmental chairperson.

RDT 304 Preparation for the National Radiologic Technology Boards **1 0 0 1**

The content specifications for the national examination in Radiography are the basis for this overview study of varied test topics. Test taking skills are applied in sample test items to improve the test taker's performance. Prerequisite: Enrollment in seventh quarter RDT Curriculum or graduate of an AMA approved RDT program or permission of the RDT departmental chairperson.

RTH 105 Theories and Principles I 4 2 0 5

This course will provide the students with knowledge of gas physics, the need for oxygen, and the control of ventilation. The theories and principles of oxygen and aerosol administration along with types of breathing therapies will be discussed in depth. The cleaning and sterilization of respiratory therapy equipment will also be discussed. Prerequisite: None.

RTH 106 Theories and Principles II 1 2 0 2

This course will provide the student with a basic knowledge of positive pressure ventilation and respiratory care of the medical-surgical patient. The effects of anesthesia on the surgical patient will be discussed. Prerequisites: RTH 105, RTH 111, RTH 139

RTH 110 Orientation: Respiratory Therapy 0 0 6 2

This course will provide the student with a general orientation of the hospital setting and the department of respiratory therapy. The students will also be introduced to medical terminology as it relates to the basic skills of patient monitoring, infection control, patient positioning, body mechanics, medical-legal aspects, and patient charting; all of which are covered in this course. Prerequisite: None

RTH 111 Clinical Experience I 0 0 15 5

The student will assist respiratory therapy personnel in the performance of various duties to include oxygen, humidity, and aerosol therapy, plus the setting up, maintaining, and cleaning of equipment. Prerequisite: RTH 110 and RTH 150.

RTH 112 Clinical Experience II 0 0 18 6

The student will perform various duties to include oxygen, humidity, and aerosol therapy; the assembly, maintenance, and cleaning of equipment; and the delivery of IPPB therapy, spontaneous nebulizer therapy, and incentive spirometry. Prerequisites: RTH 111, RTH 105, RTH 139.

RTH 113 Clinical Experience III 0 0 27 9

This course is designed to give the student an opportunity to perform and demonstrate knowledge gained in parallel courses. The student will receive clinical experience in pulmonary function testing, arterial blood gases, chest physiotherapy, and mechanical ventilation. Critical care will be stressed during this clinical experience. Prerequisite: RTH 112.

RTH 123 Clinial Experience III 0 0 18 6

This course is designed to give the student the opportunity to perform and demonstrate knowledge gained in parallel courses. The student will receive clinical experience in chest physiotherapy and blood gas analysis. Prerequisite: RTH 112.

RTH 139 Cardiopulmonary Anatomy and Physiology 3 0 0 3

This course consists of concentrated study of the structure of the respiratory system and its physiological relation to the heart and blood vessels. The student shall gain a deeper knowledge and be given a more sophisticated approach to these systems. Prerequisite: None.

RTH 140 Chest Physiotherapy **1 0 0 1**

This course through lecture and demonstration deals with chest physiotherapy procedures, including postural drainage, chest percussion and vibration, and rib springing. These procedures will be discussed and practiced in the clinical environment. Prerequisites: RTH 110

RTH 145 Theories and Principles III **2 2 0 3**

This course is designed to teach the respiratory therapy technician the theories and principles of chest physiotherapy and basic pulmonary function testing. Arterial blood gasses and basic respiratory and hemodynamic monitoring will also be covered. Prerequisite: RTH 205, RTH 106.

RTH 150 Pharmacology **1 2 0 2**

This course, through lectures and demonstrations, will provide the student with a working knowledge of pharmacological effects, side effects, contraindications, and use of the major classes of drugs. Special emphasis will be placed upon those drugs affecting the respiratory system and the autonomic nervous system. Prerequisites: None

RTH 155 Critical Care **3 0 0 3**

This course will provide the student with the skills necessary for the care of the critically ill patient. Topics to be covered will include the intensive respiratory care of the adult, pediatric, and neonatal patient. Ventilators and other equipment used in critical care will be discussed. Prerequisite: RTH 106.

RTH 205 Pulmonary Diseases **4 0 0 4**

The etiology, classification, diagnosis, progression, treatment, and prognosis of the most frequently encountered pulmonary diseases will be discussed. Prerequisite: RTH 105, RTH 139, BIO 108

RTH 211 Pediatrics **2 0 0 2**

Normal growth and development and anatomy and physiology of the newborn through pediatric age groups will be discussed. Disease process of the neonate and pediatric patient will be covered. Mechanical ventilation and critical care of these patients will be discussed in depth. Prerequisites: RTH 205, RTH 269, RTH 215, RTH 250.

RTH 215 Ventilators **2 2 0 3**

The technical aspects of ventilator care will be taught. Emphasis will be placed on maintenance, assembly, and operation of the machines used. Prerequisite: RTH 106.

RTH 218 Clinical Experience IV **0 0 18 6**

This course is designed to give the student the opportunity to perform and demonstrate knowledge gained in parallel courses. The students will receive clinical experience in intensive respiratory care to include experience in continuous mechanical ventilation. Prerequisite: RTH 123.

RTH 228 Clinical Experience V **0 0 18 6**

This course is designed to give the student the opportunity to perform and demonstrate knowledge gained in parallel courses. The student will receive clinical experience in neonatal intensive care, care of the pediatric patient, intensive care of the pediatric patient, and pulmonary function testing. Prerequisite: RTH 218.

RTH 238 Clinical Experience VI 0 0 27 9

This course is designed to give the student further clinical experience in areas he/she has already had rotations through. The student will also be introduced to respiratory and hemodynamic monitoring techniques. Critical care will be stressed during this rotation. Prerequisite: RTH 228.

RTH 240 Cardiopulmonary Rehabilitation 1 0 0 1

This course is designed to provide the student with a working knowledge of the pulmonary and cardiovascular system in relationship to cardiopulmonary rehabilitation of the pulmonary patient. Prerequisites: RTH 110, RTH 111, RTH 139, RTH 150.

RTH 241 Respiratory Therapy Department Operations 1 0 0 1

The student will work independently and as a team member in the development of a theoretical respiratory therapy department. Budget planning, space requirements, equipment purchase decisions, changes, and personnel management will be discussed. Prerequisite: RTH 228.

RTH 250 Intensive Respiratory Care 3 0 0 3

This is a course involving mechanical ventilation and intensive respiratory care of patients with various medical and surgical problems. Airway control, physical diagnosis, mechanical ventilation, and intensive care of patients will be discussed. Prerequisites: RTH 205 and RTH 269.

RTH 257 Respiratory and Hemodynamic Monitoring Techniques 2 2 0 3

This course is designed to give the respiratory therapy student a broad background and understanding of the various respiratory and hemodynamic monitoring modalities in use today. Arterial and venous pressure monitoring. Swan-Ganz catheterization, medical mass spectrometry, and equipment calibration techniques will be stressed. Prerequisite: RTH 269, RTH 268.

RTH 268 Pulmonary Function 3 0 0 3

This course is designed to provide the respiratory therapy student with a comprehensive knowledge of diagnostic pulmonary function testing. Technical theory, manual calculation, and interpretation of each diagnostic test will be presented. Prerequisites: RTH 205 and RTH 269.

RTH 269 Cardiopulmonary Pathophysiology 4 0 0 4

This course is designed to acquaint the student with normal and abnormal physiological functions associated with pulmonary and cardiovascular disease processes. Prerequisites: RTH 205, RTH 139, BIO 111.

SAF 3005 Cardiopulmonary Resuscitation (CPR) 0 0 0 0

This is a 12-hour course teaching the proper and up-to-date techniques of the method of cardiopulmonary resuscitation. The course includes classroom and laboratory learning techniques. Prerequisite: None.

SCI 101 General Science 3 0 0 3

This is a study of the basic concepts from biological, physical, and natural sciences. Prerequisite: None.

SOC 010 Study Skills 3 0 0 0

The objective of this course is to help the student determine achievement levels and learning style, plan learning strategy, and develop learning skills necessary for effective academic success. Opportunity for self-assessment will be provided through standardized tests and individual profile interpretation. A variety of study techniques will be presented with special emphasis on using textbooks properly, taking and organizing notes, flash cards, effective examination skills, and library techniques. Prerequisite: None.

SOC 020 Academic Survival Skills 2 0 0 0

This course is designed to encourage the student to accept the responsibility for his/her own academic success through identifying learning styles and planning effective learning strategies. Reading skills, listening skills, note-taking skills, and test-taking skills will be explored. Prerequisite: None.

SOC 100 Sociology I 0 4 0 2

This course is the recognition and development of human potential through emphasis on positive achievements, characteristics, and attitudes. Beginning sessions will seek to establish for each student those things about himself/herself that he/she can like and take pride in. Early in the course students will begin a process of establishing short-term goals. Other positive processes will include an analysis of strengths, identification of personal values, recognition of latent potential, and establishment of long-range goals. Prerequisite: None.

SOC 101 Sociology II 0 4 0 2

This course is a continuation of the process begun in SOC 100 Sociology I, with more in-depth analysis of individual potential and more emphasis on long-range goal establishment. The student will be encouraged to be aware of his/her feelings and to utilize them to advantage. Honest self-appraisal, development of self-confidence, and positive self-image are primary objectives. Prerequisite: SOC 100.

SOC 102 Principles of Sociology 5 0 0 5

This is an introductory course in the principles of sociology. An attempt is made to provide an understanding of culture, collective behavior, community life, social institutions, and social change. It presents the scientific study of man's behavior in relation to other men, the general laws affecting the organization of such relationships, and the effects of social life on human personality and behavior. Prerequisite: None.

SOC 103 Sociology 3 0 0 3

The student will examine the social environment in which personality matures and will analyze the major social institutions as well as the major social processes. Attention is given to the scope, methods, and concepts of sociology. Prerequisite: None.

SOC 105 Families in the American Culture 3 0 0 3

This course is the study of the family in the American culture, changing patterns in family roles, the influence of socioeconomic status on family relationships, factors associated with cultural deprivation, and the effects on children in such families. Prerequisite: SOC 103.

SOC 209 Social Problems 3 0 0 3

This is an analysis of modern social organization and disorganization as they relate to various social problems in contemporary American society. Prerequisite: SOC 102.

SOC 210 Minorities in American Society 3 0 0 3

This is a study of the historical and scientific questions of race, sociocultural patterns in various interracial areas, and inquiry into the problems of conflict adjustment. Prerequisite: None.

WLD 1101 Basic Gas and Arc Welding 1 0 3 2

The course includes welding demonstrations given by the instructor and practice by the students. The safe and proper methods in the setup and operation of welding equipment are demonstrated. Practice is given in joining metals by torch welding, brazing, silver soldering, soft soldering, and shielded metal arc mechanical repair work. Prerequisite: None.

WLD 1105 Introduction to Shielded Metal Arc Welding 1 0 6 3

This course will place emphasis on safety aspects of shielded metal arc welding equipment, materials, and procedures. Special consideration will be given to electrode identification and application. Practical application will include an orientation to and comparison of MIG and TIG processes and equipment relative to auto and truck body repair. Prerequisite: None.

WLD 1111 Air Conditioning Welding 0 0 3 1

This course includes welding demonstrations by the instructor and practice by the students. The safe and proper methods in the setup and operation of welding equipment are demonstrated. Practice is given in brazing, braze welding, and hard and soft soldering of ferrous and nonferrous metals. Flame cutting methods are practiced as applicable to mechanical repair work that the air conditioning technician will encounter in the field of work. Prerequisite: None.

WLD 1113 Mechanical Testing and Inspection 1 0 3 2

This course covers the standard methods for mechanical testing of welds. Types of tests covered are bend, destructive, free-bend, guided-bend, nick-tear, notched-bend, tee-bend, nondestructive, V-notch, and Charpy impact. Prerequisite: None.

WLD 1120 Oxyacetylene Welding and Cutting 4 0 15 9

This course provides an introduction to the history of oxyacetylene welding, the principles of welding and cutting, nomenclature of the equipment, and assembly of units. Welding procedures such as practice of puddling and carrying the puddle, running flat beads, butt welding in the flat, vertical, and overhead positions, brazing, and hard and soft soldering are covered. Safety procedures are stressed throughout the program of instruction in the use of tools and equipment. The performance of mechanical testing and inspection to determine quality of the welds is made. Prerequisite: None.

WLD 1121 Basic Arc Welding 4 0 15 9

Arc welding power source capabilities, scope of functions, components, and their care and maintenance will be covered in the course. The significance of "F" numbered electrodes and their application in the welding process will be included. Development of manipulative skills needed to make correct welds in the flat position will be an objective of the course. Safe and correct arc welding practices will be demonstrated and will be required of the students. Prerequisites: None.

WLD 1123 Inert Gas Welding **1 0 6 3**

This course provides an introduction and practical operations in the use of inert gas-shielded arc welding. A study of the equipment, operation, safety, and practice in the various positions is made. A study of such topics as principles of operation, shielding gases, filler rods, process variations and applications, and manual and automatic welding are also made. Prerequisites: WLD 1121.

WLD 1124 Advanced Arc Welding **3 0 12 7**

This course includes extensive practice in the welding in all positions. The micro-wire welding process and a study of such topics as principles of operation, nomenclature of machine, filler metals, and shielding gases are included. Prerequisite: WLD 1121

WLD 1126 Advanced Inert Gas Welding **3 0 9 6**

This course is a continuation of WLD 1123-Inert Gas Welding with more theory and practice in inert gas welding. Both ferrous and non ferrous welding applications are covered. Inert spot welding, CO2 welding, gas-metal arc, and automatic welding are taught. Special consideration is given to shielding gases. Prerequisite: WLD 1123.

WLD 1128 Welding Procedures and Practices **1 0 6 3**

This course provides an introduction to practical applications for certification procedures according to A.W.S. D1.1 as well as welding and preparing test coupons. Prerequisites: WLD 1120, WLD 1121, WLD 1124, WLD 1126.

WLD 1130 Applied Basic Arc and Gas Welding **2 0 6 4**

This course includes welding demonstrations given by the instructor and practice by the students. The safe and correct methods of assembling and operating welding equipment are emphasized. Practice is given in joining and surfacing of ferrous metal by brazing, braze welding, and fusion welding. The effects of expansion and contraction are covered to minimize warpage of auto body components. Oxyacetylene flame cutting is practiced as applicable to auto body and chassis repair work. Prerequisite: None.

WLD 1131 Applied Inert Gas Welding **2 0 3 3**

This course includes an introduction and practical operation of the inert gas welding processes. A study of the principles of operation of shielding gases, filler metals, MIG guns, TIG torches, and TIG spot guns will be covered. Special attention is given to the joining of thin metals, both ferrous and nonferrous. Safety procedures are emphasized throughout the course. Prerequisites: WLD 1130 and WLD 1105.

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L. Hackett French Western Electric Co. (Retired)	1991

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Dewitt E. Rhoades President, DERA, Inc.	1989
Mrs. Selvey J. Boyer Instructor, Parkland High School	1991

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Dr. H. P. VanCleve Bowman Gray School of Medicine (Retired)	1989
Virgil L. McBride President, The Projects Group	1991

APPOINTED BY STUDENT GOVERNMENT ASSOCIATION

Current SGA President (Non-voting member)	Elected annually

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Benjamin L. Howell	Director, Counseling Services
George McLendon	Director, Admissions and Career Guidance Center
J. Bruce Shepherd	Director, Records and Registration
Charles R. King	Counselor
Colleen R. Richardson	Counselor
Sandra W. Suggs	Admissions Counselor
Rebecca M. Weaver	Admissions Counselor
E. Lorraine Wood	Admissions Counselor
Brenda A. Green	Records and Registration Assistant

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Joyce W. Keith	Director of Financial Services
Jerry D. Rogers	Director of Auxiliary and Plant Services
Diane L. Sims	Director, Student Financial Services
Beverly A. Vredenburg	Computer Systems Operator/Programmer

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Individualized Learning Center

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Anne M. Teachey	Coordinator

Public Relations

Jean R. Perkins	Coordinator

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Thomas F. Gordon	Reader Services Librarian
Brenda B. Bodsford	Audiovisual Technician
Polly C. King	Head, Library Technical Assistant
Jennifer Y. Springs	Library Technical Assistant

Student Placement and Activities

James A. Shields	Director
Sheila B. Shields	Student Activities Facilitator

Visiting Artist

Michael Thompson	Visiting Artist

Small Business Education Center

Dr. E. Ann Tyndall	Director

ADMINISTRATIVE SERVICES

Larry V. Weaver, Administrative Assistant to the President

Public Safety

Lester G. Brown	Director
Thomas P. Johnson	Sergeant

FACULTY AND STAFF

Affeldt, Harley P. ....Dean, Engineering Technologies Division
B.S., M.Ed., Virginia Polytechnic Institute; Ed.D., Nova University

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B.S., M.A., Appalachian State University

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A.B.T., High Point College

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Licensed plumbing contractor with experience in residential and commercial contracting

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Sworn Deputy Sheriff

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Day, Garry H. ....Department Chairperson, Graphic Arts
B.S., Appalachian State University

DeVane, Gloria H. ....Pre-Technical
B.S., North Carolina Central University

Dillard, Betty G. ....Humanities
B.A., Winston-Salem State University; M.A., Wake Forest University

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Barber, Deborah	Secretary, Administrative Assistant
Beane, Larry	Public Safety Officer
Blackburn, Ruby	Secretary, Adult Basic Education and Adult High School
Bodsford, Brenda	Audiovisual Technician
Boger, Dawn	Secretary, Auxiliary and Physical Plant Services
Bowen, Karen	Secretary, Business Technologies Division
Branch, Emily	Executive Secretary
Brown Betty	Switchboard Operator
Brown, Sherry	Secretary, Administrative Assistant
Burton, Gail	Payroll Bookkeeper
Chandler, Terri	Secretary, Counseling Center
Culbreth, Beth	Public Safety Officer
Dillard, Rose	Secretary, Pretechnical
Elphinstone, Frances	Secretary, Vice President, Planning and Development
Flynt, Ethel	ILC Secretary
Fulk, Joan	Accounts Payable Bookkeeper
Galyean, Jo Ann	Equipment Coordinator
Gilbert, Jessie	Secretary, Records Office
Gordon, Margaret	Secretary, Associate Dean of Occupational Extension
Grubbs, Julia	Secretary, Health Technologies Division
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Lehman, Carol	Secretary, Admissions
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Marsh, Judith	ILC Coordinator
McClive, Patricia	Printing Technician
Mecum, Ann	Secretary, Engineering Technologies Division
Neas, Jan	Special Funds Bookkeeper
Pegram, Lucille	Secretary, Director, Student Financial Services
Piercey, Barbara A.	Secretary, Library
Slater, Shirley	Executive Secretary
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Springs, Jennifer	Library Technical Assistant
Swaim, Cathy	Secretary, Vice President for Business Affairs
Tallent, Britia	Secretary, Public Safety
Wilson, O. Diane	Financial Aid Assistant
Wise, Barbara	Secretary, Dean, General Studies

MAINTENANCE AND CUSTODIAL SERVICES

Wallace, Robert L. ....Maintenance Supervisor

MAINTENANCE MECHANICS

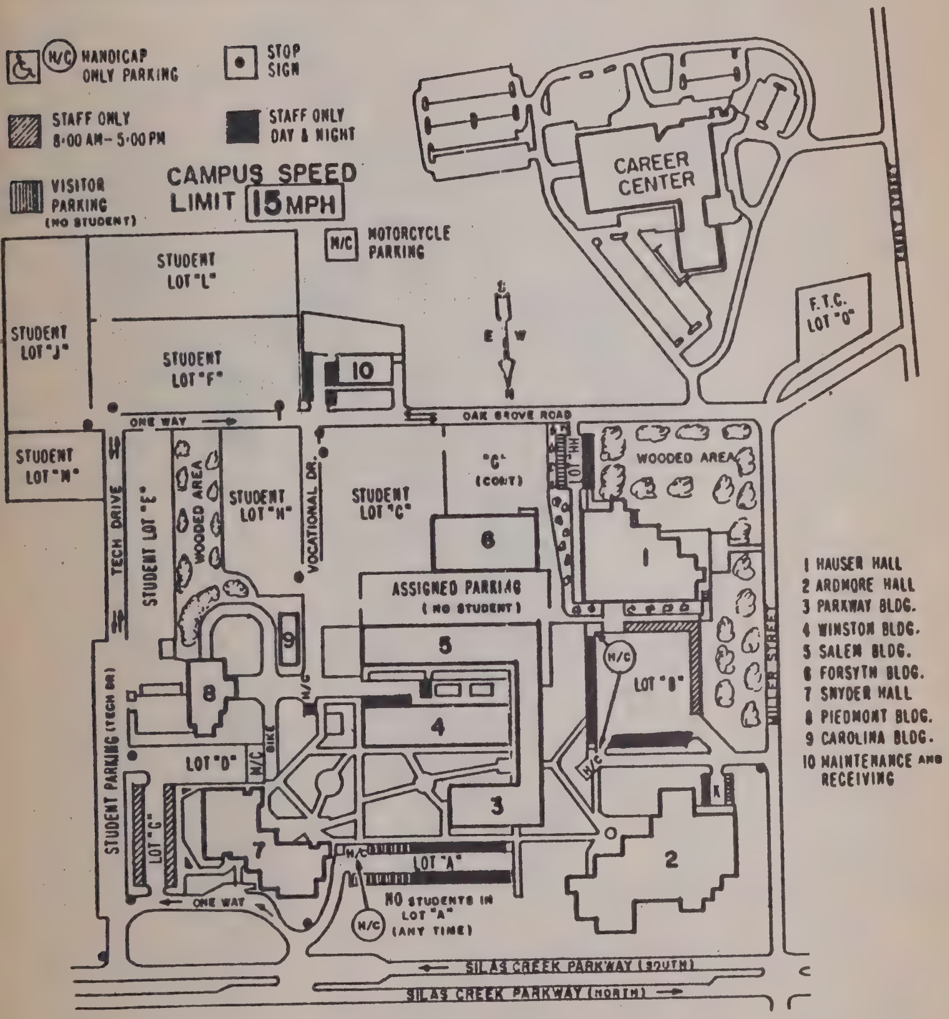
Nathan A. Albright
Walter L. Bethea
Carroll Burnette
Michael Edwards
Roger E. Higgins, Jr.
William T. Leonard
Kathy Mabe
Scott Quesenberry
Ardeal Roseboro

Clark, Lillie B. ....Custodian/Housekeeper Supervisor

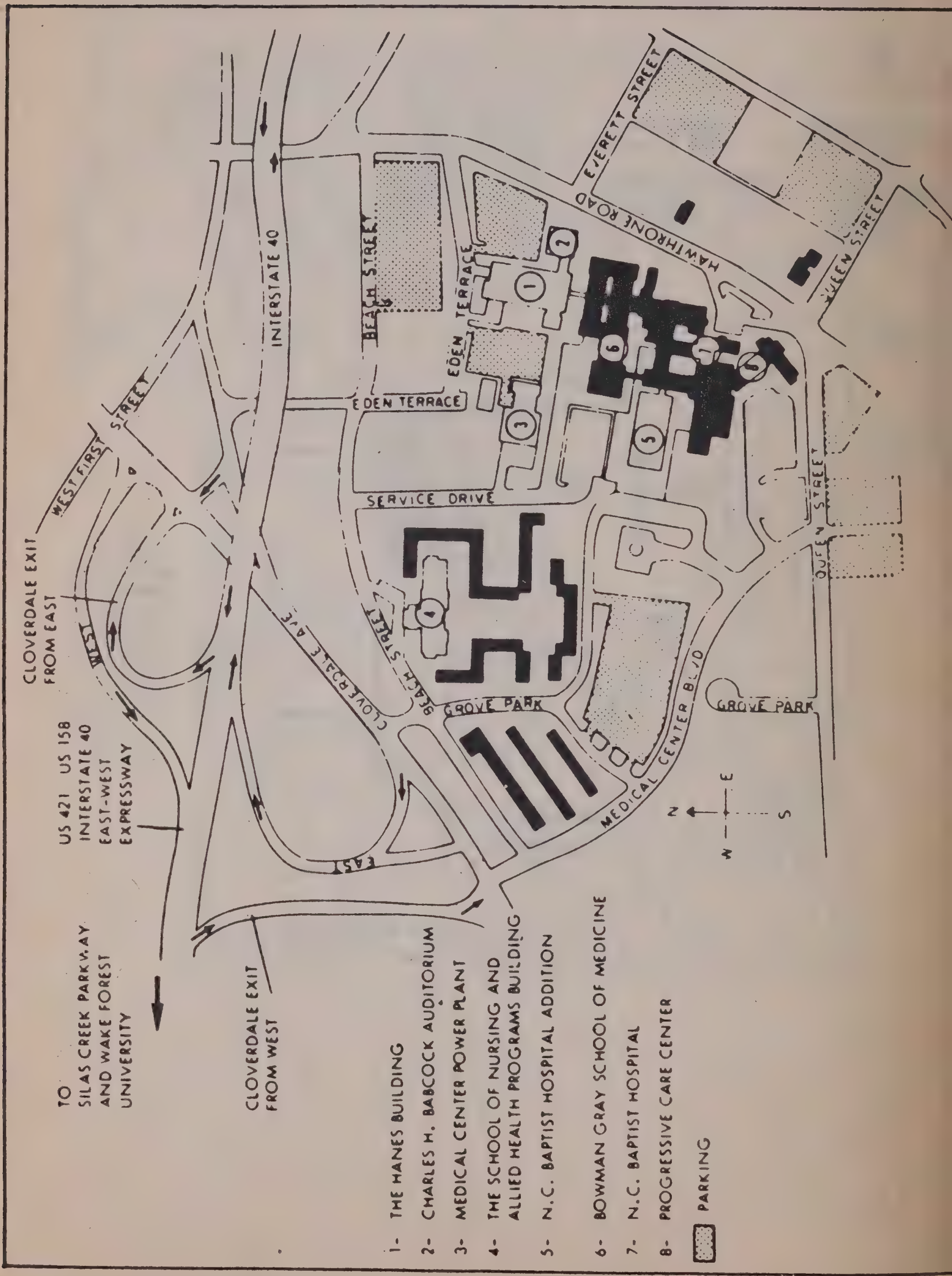
CUSTODIANS/HOUSEKEEPERS

Castina Cremedy
Bonita Crosby
Donna Jones
Betty Larkin
Leonard Melton
Christen Nelson
Beulah Scales
Michael Sheff
Ruth Springs
Flossie Williams

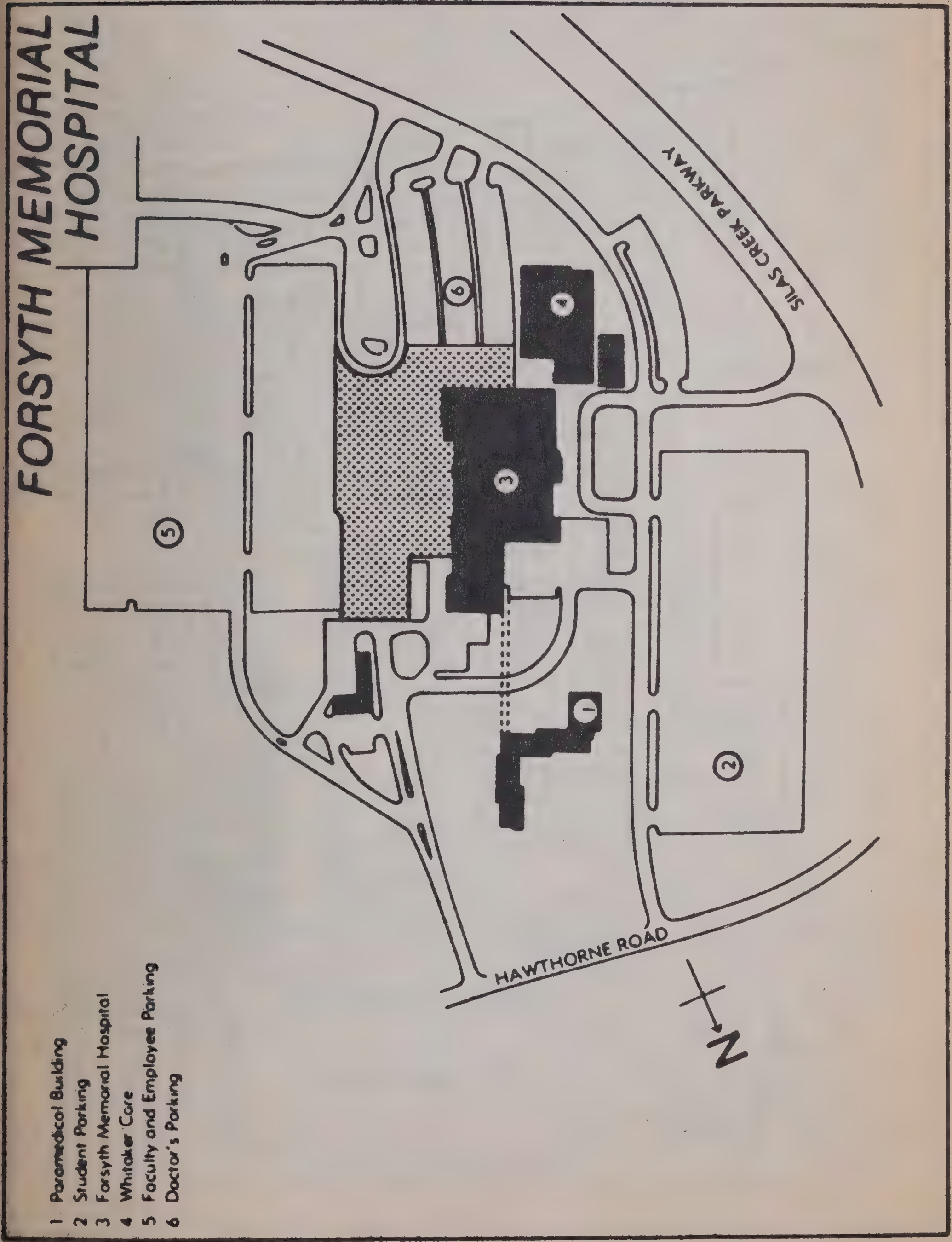
MAIN CAMPUS


H/C HANDICAP ONLY PARKING
STOP SIGN
STAFF ONLY 8:00 AM – 5:00 PM
STAFF ONLY DAY & NIGHT
VISITOR PARKING (NO STUDENT)
CAMPUS SPEED LIMIT 15 MPH
M/C MOTORCYCLE PARKING
CAREER CENTER
S
E
W
N
F.T.C. LOT "O"
STUDENT LOT "L"
STUDENT LOT "J"
STUDENT LOT "F"
10
ONE WAY
OAK GROVE ROAD
STUDENT LOT "M"
TECH DRIVE
STUDENT LOT "E"
WOODED AREA
STUDENT LOT "H"
VOCATIONAL DR.
STUDENT LOT "C"
"C" (CONT)
WOODED AREA
6
1
ASSIGNED PARKING (NO STUDENT)
9
5
H/C
LOT "B"
MILLER STREET
8
4
LOT "D"
M/C
BIKE
STUDENT PARKING (TECH DR)
LOT "C"
7
3
2
LOT "A"
NO STUDENTS IN LOT "A" (ANY TIME)
ONE WAY
SILAS CREEK PARKWAY (SOUTH)
SILAS CREEK PARKWAY (NORTH)
1 HAUSER HALL
2 ARDMORE HALL
3 PARKWAY BLDG.
4 WINSTON BLDG.
5 SALEM BLDG.
6 FORSYTH BLDG.
7 SNYDER HALL
8 PIEDMONT BLDG.
9 CAROLINA BLDG.
10 MAINTENANCE AND RECEIVING

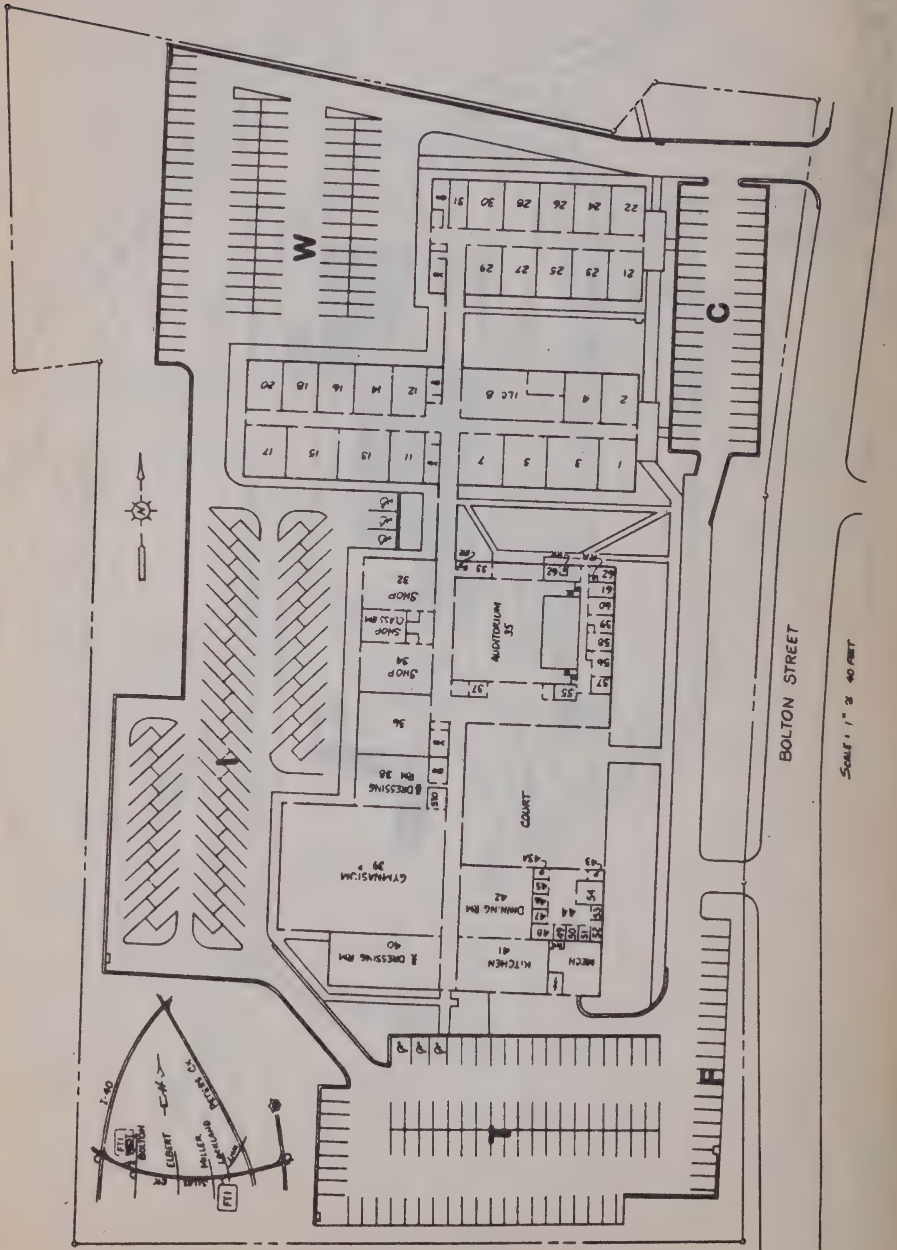
MEDICAL CENTER



FORSYTH MEMORIAL HOSPITAL



WEST CAMPUS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SHOP CLASSRM
SHOP 34
AUDITORIUM 35
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DRESSING RM 38
GYMNASIUM 39
& DRESSING RM 40
KITCHEN 41
DINING RM 42
COURT
MECH
BOLTON STREET
SCALE: 1" = 40 FEET
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BOLTON
ELBERT
MILLER
LAKELAND
PETERS CT
FTI

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